A DEGREE GRANTING INSTITUTION FOR NORTHERN BRITISH COLUMBIA

A Report Submitted

to

The Minister of Advanced Education and Job Training
Province of British Columbia

by

The Implementation Planning Group, an advisory committee
established by the Minister

December 1989

90-02666/

IMPLEMENTATION PLANNING GROUP

Appointed by Stanley B. Hagen, Minister of Advanced Education and Job Training and Minister Responsible for Science and Technology to make recommendations regarding a degree-granting institution of the north.

The Honorable Bruce Strachan
Minister of Advanced Education,
Training and Technology
Room 326, Parliament Buildings
Victoria, B.C.
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December 29, 1989

Dear Mr. Minister:

In April 1989, the Implementation Planning Group (IPG) was appointed to submit to you, by December 31, 1989, a detailed plan for the creation a self-governing, degree-granting institution structured specifically to meet the needs of Northern British Columbia. It should also plan to attract students from outside the North. At the same time, terms of reference and a set of criteria by which our committee's recommendations are to be assessed were issued.

We began our task in early May and conducted our work as a full committee, as well as in numerous sub-groupings. We studied relevant literature and investigated many post-secondary institutions, their development, experience and features. We assigned specific tasks to several consultants, we met with many organizations and individuals, and we received, read, and considered an impressive number of written submissions which we had invited. Statistical data collected from various sources were subjected to challenge and test before being used in this report. Finally, we weighed carefully a wide array of advice, counsel and stated expectations.

As a result of these deliberations, we recommend the establishment of a university in Northern B.C. with full status under the University Act and with strong regional representation in its bodies of governance. The proposed university's form, character, mandate and scope, and our reasons for the recommendation, are outlined in the report which follows.

We are satisfied that the university as recommended will meet the criteria of academic quality, degree credibility, financial viability and sustainability. It will greatly enhance post-secondary opportunity and quality in the northern part of the Province and B.C. as a whole. The projected increase in post-secondary participation should strengthen enrolment at the regional colleges, whose independent status should be retained. Finally, a northern university will address many of the social and manpower needs in the region, and will stimulate cultural and economic growth.

We see a distinctive opportunity for the new institution to place a strong emphasis on students' needs, a feature sometimes diminished in the large and mature universities. Opportunity for study by as many individuals in as many locations as practical, co-operative education, and the prospect of degree completion for college diploma holders, are but a few examples of our recommendation for an institution where "the student comes first".

Developing a new university is a dynamic process. Those given the task of implementation must have the latitude to assess priorities and opportunities in order to determine the most appropriate steps to achieve operational status in the shortest time possible without sacrifice of quality. The time needed for orderly development of the ultimate institution, contrasted with the pent-up need for access, will require interim arrangements best made by those in charge. For these reasons, we have refrained from presenting a detailed blueprint for implementation.

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On the other hand, we have attempted to outline rather firmly the essential elements of implementation, and the critical features of the university. These should not be altered or weakened by the future executive and governors.

We believe that we have satisfactorily covered all the terms of our mandate except one: a name for the proposed degree granting institution. It is our committee's view that the community should have its say in this selection. As the Interior University Society is presently conducting a name contest, we recommend that it be asked to submit by January 31, 1990 a selection of no more than three names for your consideration. This should be sufficient time for initiating the necessary government approvals and legislation.

In conclusion, Mr. Minister, we have expended our best efforts, and we have exercised great care, in addressing the challenging and exciting task assigned to us. We hope that this report, and the supplementary material listed below, will assist you, your staff, and the Cabinet, in reaching a decision that will improve access, opportunity and quality in education for many British Columbians of all ages. As we heard so often during the last few months: a regional university in northern B.C. has the potential of bringing more widely dispersed benefits to this important part of our province than any other project. We share this view.

We take this opportunity and express our gratitude to the many individuals who took the time to guide us, educate us, provide important information and contribute thoughtful counsel.

The following supplementary information is provided under separate cover.

A. Decima Research commissioned by the IPG
B. Written submissions received by the IPG
C. Cornerstone Planning Group estimates of facilities
D. Curriculum proposals for four Professional and Applied Programs.

Yours respectfully,

Horst Sander, Chairman

Murray Sadler, Prince George
Member

Elsie Gerdes, Prince George
Member

Edward John, Prince George
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Thomas A. Steadman, Prince George
Member

Dennis Mitchell, Dawson Creek
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INTRODUCTION

The Implementation Planning Group (IPG) was established in May 1989 by the Honourable Stanley Hagen, Minister of Advanced Education and Job Training for the Province of British Columbia. It was charged with the responsibility of providing the Minister with "...a detailed plan for the creation of a self-governing, degree-granting institution structured specifically to meet the needs of northern British Columbia." It was required to submit its report by December 31, 1989.

Thirteen persons were appointed to the IPG. Eight members including the Chairman, came from various northern communities and the remaining five members came from other parts of the province. The committee was provided with detailed terms of reference and a set of criteria against which its report would be assessed. (Terms of Reference, membership, and Assessment Criteria can be found in Appendix A.) The committee was also provided with a technical staff, an operating budget, and was encouraged to obtain the services of consultants and additional staff as need dictated.

The entire committee met a total of eight times in either Prince George or Vancouver. In addition, various sub-committees and ad hoc groups appointed by the Chairman for specific purposes met on numerous occasions. A consultant and a project director appointed by the committee met regularly with the entire committee and the Education sub-committee. As well, other consultants were commissioned to produce research and technical reports.

The committee actively sought written submissions from individuals and groups within the region. More than 65 briefs and letters were received. (A list is provided in Appendix H.) All the submissions supported an increase in educational opportunity in the North. Though a variety of institutional forms were proposed in the material we received, the vast majority of them favoured the establishment of an autonomous university. Similarly, a wide range of programs was proposed for inclusion in the university, far more, in fact, than could reasonably be accommodated given the scale of operations we visualize. Nevertheless, the submissions collectively represented a quite remarkable array of serious thought and concern. We have given them the careful attention they deserve.

The committee held formal meetings with several interested groups. The entire committee met with the executive of the Interior University Society. As well, members of the committee held separate meetings with the Boards and Faculties of the three colleges in the region. These meetings provided a useful means for learning at first hand of the matters we should take into account.

The report which follows this introduction has been prepared with the greatest care, wisdom and sensitivity we could muster. We believe that it addresses the requirements set for it in our terms of reference. We hope it proves to be a helpful vehicle for the Government of the province to use in its efforts to improve access to educational opportunities in the North with the many benefits that this will bring to the region.

RECOMMENDATIONS AND SUGGESTIONS

The Implementation Planning Group (IPG) recommends that a university be established in Northern British Columbia. It should be given a status equal to that of the existing universities of the province. It should be encouraged to address the unique needs and opportunities of the North. It should be provided with the resources necessary to enable it to become a potent force in the educational, economic, social and cultural development of the North.

In the following pages we will state our reasons for recommending the establishment of a university and our basis for believing that the institution will be viable and sustainable. We will provide estimates of enrolments and costs, and we will suggest how the university might function in terms of governance, curriculum, regional considerations and other matters.

WHY A UNIVERSITY?

It is our strongly held conviction that a degree granting institution in Northern British Columbia must be capable of addressing, to the fullest extent possible, the particular needs, problems and opportunities of the region. It must have teaching programs at the three degree levels—bachelor's, master's, doctoral—in disciplines and professions of greatest need. It must sponsor and support research activities, particularly those related to the region. And it must have sufficient autonomy, within statutory and fiscal bounds, to tailor its policies and procedures to a diverse and widely dispersed population. Other kinds of degree granting institutions could meet some of these challenges, but only a university can meet them all.

As our terms of reference required us to do, we have studied options other than the creation of a university but none, in our judgment, possesses the full range of capabilities we think essential. For example, excellent undergraduate courses and programs could be imported into the region under the sponsorship of the coastal universities. But this arrangement would not answer the need for advanced degrees. Neither would it create a coherent research capability. Most importantly, the programs and their regulations would remain under the control of a university many hundreds of miles away whose own campus traditions and activities would be its first priority.

Another possibility we considered was a four year institution offering bachelor's degrees and strongly emphasizing the teaching function. Institutions

like this are found in many parts of the United States but they are not common in Canada. It could be called a university, as was the case with Notre Dame University of Nelson, but some would find the designation misleading. This arrangement, though superior to the imported program option, would not provide all the capabilities we feel are necessary, specifically those relating to graduate studies and research. More serious than this deficiency would be the development of a not so subtle status differential between the coastal universities and the northern institution. On this point, earlier decisions by government are instructive. In 1963 there were those who counselled that the University of Victoria and Simon Fraser University be established with a lesser academic standing than that of the University of British Columbia in order to concentrate research and graduate training at UBC. The government chose to disregard this advice and instead accorded SFU and UVic full academic standing. This decision has enabled those institutions to move rapidly through infancy to a point where their programs and graduates are now well-regarded across the country.

All universities, in addition to performing the functions of a four year college, share two interrelated characteristics: research activity and graduate programs. Beyond this, they vary from one another in numerous ways—size, internal operating systems, breadth of curriculum, fields of emphasis and so on. The university we recommend will be relatively small, certainly in its early years, and thus, of necessity, will have a limited range of courses and programs. But smallness must not be permitted to so constrain the university as to limit its usefulness to potential students. An exclusive emphasis on Arts and Science or on professional fields, for example, can be found in high quality universities elsewhere. However, we have concluded that such narrowness would be inappropriate to the educational needs of the North. A description of the alternative models we considered is provided in Appendix F.

Of great importance to students is the credibility of the degree or credential they receive. In the long run, the quality of the northern institution's degrees will be demonstrated by the academic and professional success of its graduates and the scholarly achievements of its faculty. In the shorter term, other means must be found to assure employers and graduate school admissions boards at other universities that the new institution meets acceptable academic standards. The best way of doing this is to ensure that the institution can be admitted to the Association of Universities and Colleges of Canada (AUCC). Our recommended Mission Statement is provided in Appendix B. We believe that the form, status and operations of the university we recommend and describe are in line with AUCC requirements.

There is overwhelming community support for the establishment of a university in the North. The Interior University Society with its 15,000 members is tangible evidence of this fact. Further evidence of community backing and potential enrolment is provided by the results of the professional surveys we commissioned. A remarkably high percentage of respondents

stated strong support for the university with programs similar to those outlined herein. A summary of the market survey is provided in Appendix I. Undoubtedly some of this positive reaction is motivated by the economic benefits which would result from a new payroll in the region. Other support probably flows from the feeling that the North has not received its fair share from the province's educational purse. Important as these perceptions may be, they are not the overriding determinants in deciding what kind of senior educational institution will best serve the region. More persuasive to us, in this regard, was the content of the numerous written and oral submissions we received. Though they differed in form and content they expressed a number of consistent themes, namely:

- There is a need for bachelor's degree programs and degree completion opportunities in Arts and Science.
- There is a need for bachelor's level programs in professional fields such as teaching and other areas of regional need.
- There is a need for degree programs which build on the foundation provided by college programs.
- There is a need to develop programs for the native communities.
- There is a need for post-baccalaureate programs in a number of fields.
- There is a need for research capacity in the North in order to address economic, intellectual and other issues.

These expectations are formidable in their scope; we have concluded that they are legitimate. They can be met, but even then only in part, by establishing a university. Another institution might address some of them, but a university is unquestionably the best means of addressing them all.

There are other and more subtle reasons for our recommendation which have to do with the less immediately obvious effects of a university on a community and region. It is widely recognized, for example, that participation rates in university studies are related to proximity to learning opportunities. These rates are higher in Burnaby and Kerrisdale than in the North at least in part because of the proximity of universities. Another determining factor is the educational attainment of parents; a higher proportion of children of university graduates undertake university studies than children of non-graduates. The two influences, proximity and parental educational level, are interrelated and obviously take at least a generation to achieve full force. The establishment of a university will have an immediate and increasing effect on educational levels in the North, because it will present visible, accessible and attainable learning opportunities.

As well as encouraging participation in courses and programs, the presence of a university makes a community a more interesting and vital place in which to live. The intellectual and cultural activities of a university contribute to the quality of life of residents as well as students. And the quality of community life is a significant factor in attracting and retaining the professionals and skilled workers who contribute to the economic development and general well-being of the North.

One final point must be mentioned. The university we recommend will obviously be established in the North and will address many of the concerns of the region. At the same time, however, it will be a provincial university and, as such, will participate in the broader educational and academic concerns of the province. For one thing, it will play a small but increasingly significant role in reducing the general enrolment pressures on the coastal universities. Somewhat related to this, it will provide additional capacity in certain high demand fields in which coastal universities are particularly hard-pressed. It will provide further relief to the other universities by assuming responsibility for some off-campus programs they have offered in the North. These contributions will assist the attainment of the goals of the Ministry's Access Report. Finally, because of its strategic location in the province, it will create new opportunities for inter-university cooperation in research and scholarship.

In short, we believe that a university is needed in northern British Columbia, that it will have a profound and beneficial influence on the region, that it, rather than another kind of post-secondary institution, is best suited to meet the challenges enumerated by residents of the North, and that it will become a useful contributor to the educational and academic life of the province.

WHAT KIND OF CURRICULUM WILL THE UNIVERSITY OFFER?

The curriculum which the university will offer will ultimately be determined by its Board and Senate following advice they receive from the President and Faculty. Further, the extent of curricular offerings will be constrained by the financial resources made available by the Province. In turn, financial resources will be defined by student enrolments which result in per capita grants and fee revenue. Thus, in the last analysis, student enrolments affect the breadth of curricular offerings; the larger the enrolment, the broader the curriculum. At the same time, enrolments are strongly influenced by the nature and quality of the programs offered; an inappropriate curriculum will result in low enrolment.

Since there is an obvious interaction between the nature of the curriculum and enrolment size it is difficult to discuss them separately. Despite this, we will deal with the curriculum question first, stating in advance that even with very conservative enrolment estimates our proposal, or one similar to it, will

result in a viable and sustainable university. In the following section of this report we will deal with the enrolment question.

Three additional factors must be borne in mind. First, significant portions of the curriculum should be capable of delivery to communities in the region and thus, program design should take this into account. Second, the curriculum should permit the maximum possible transfer credit from community colleges and other universities as well as from the new university to other universities. Third, without distorting the necessary general content of academic and professional courses, the curriculum should communicate a northern flavour. Teaching in a small rural community, for example, has some significant differences from teaching in a large urban centre and the program should reflect this fact. Similarly, a business program, as well as dealing with the topics normally found elsewhere, should give attention to the unique problems of business activities in the North. In addition, certain courses in Arts and Science will provide opportunities for imparting content related to the North, including native issues.

UNDERGRADUATE CURRICULUM

Our suggestions on curriculum should not be viewed as the initial academic plan of the university. As we have said, decisions on programs, regulations and methods of course delivery will be the responsibility of the university's Board and Senate. Nevertheless, we felt it necessary to demonstrate that it was possible to design an academically respectable, administratively feasible and financially viable curriculum for the university. Through the use of detailed simulations, we have proven to our satisfaction that our illustrative plan, or one similar to it, is workable even given very conservative enrolment estimates; once the start-up phase is over, operating costs should be within the Ministry's financial guidelines for universities. If enrolments are higher than the modest targets we have set, as some of our members feel they will be, an increased range of services can be made available.

It is likely that some will criticize the relative narrowness of the program options we suggest. However, had we based our recommendations on higher enrolment estimates we would have had increasing difficulty in assuring the Minister that the university would be viable and sustainable. In short, we felt it was preferable to provide reasonable assurance that the significant investment government may choose to make is relatively risk free rather than to base our recommendation on easily challengeable assumptions.

We suggest that the university undergraduate curriculum initially offer two kinds of undergraduate programs: degrees in Arts and Science with concentrations in approximately twelve disciplines, one of which would be aboriginal studies; and from four to six carefully designed professional programs of relevance to the North and the entire province. Provision for

aboriginal studies and native students can be made within these two programs and we will comment on this issue later in this section.

The university should operate under a semester system with provision for certain courses to be offered during the third semester and in briefer, more intense periods of study. It should award transfer credit liberally and avoid needlessly complex patterns of requirements such as pre-requisites, co-requisites and the like. (More will be said later in the report concerning the need for university/college cooperation.) Though a good many programs or courses may need to be offered at a central location, the university should develop plans and course delivery arrangements to ensure that students may complete full or major components of several programs at various locations in the North.

Degree Programs in Arts and Science

Requirements for the B.A. and B.Sc. degrees should call for twenty lower division courses (Years 1 and 2) and twenty upper division courses. In the upper division, students would undertake 18 semester hour concentrations in two disciplines. This arrangement differs from the more common single concentration (major) of 30 semester hours found in B.C. universities but has precedents in B.C. and elsewhere. Further, it makes regional delivery feasible, requiring as it does the mounting and offering of only six courses per discipline. It also meets the requirements of the College of Teachers — an important consideration for many potential students.

Some may feel that a discipline concentration of only six courses in the upper division is too narrow. It is possible, however, through a judicious selection of courses to provide reasonable coverage of the essential topics and forms of inquiry of a discipline. The enormous array of optional courses found in some university departments is not necessarily to the advantage of students, reflecting, as it frequently does, the specialized interests of professors rather than the needs of students or even the dictates of the discipline. There may be certain students in the North who desire more courses in a given discipline than are available. In this case they could take courses through the Open University or another university and receive transfer credit on their degree program.

Degree Programs in Professional and Applied Fields

Requirements for professional programs will vary depending on the particular program, again bearing in mind that final decisions will be made by the Board and Senate of the university. Nevertheless, programs will likely possess some characteristics in common. It would be desirable, for instance, for groups of perhaps twenty-five students to be admitted to each program and to move together through a set sequence of courses. As with Arts and Science, certain lower division requirements would be met through transfer credit. Notable among transfer credit arrangements should be full credit for two year college diplomas for entry into those programs which are logical extensions of

prior work. Field experience in the form of practica or cooperative education placements should be a feature of programs where this is appropriate and placements are available.

We have made fairly detailed studies of the feasibility of offering four professional programs (teaching, business studies, natural resource management, and applied computing). We have concluded that they could be offered at a high level of quality and at a realistic cost. In addition to the four programs we suggest, professional groups have provided cogent and well-reasoned briefs recommending the inclusion of nursing and forestry. Several other possibilities have been mentioned.

We suggest that at least four professional programs be offered initially and that an additional three or four be developed for offering as soon as the first ones are operational. We fully realize that the university, after a more detailed feasibility study, may choose a different set of initial programs than we suggest. Nevertheless, the four illustrative programs mentioned below provide a useful means for visualizing the nature of the curriculum we are suggesting and for estimating its operating costs.

Teacher Education — A program for preparing teachers should be developed as soon as possible. There is an urgent and growing need for teachers in the North. There are many good reasons for suggesting that the program be fashioned after Simon Fraser University's Professional Development Program (PDP). This program is well regarded in the North and elsewhere and has been offered successfully in many B.C. communities. It is currently operating, under SFU auspices, at several points in the North.

The PDP is a three semester sequence with alternating school and campus activities. It forms part of a B.Ed. degree with studies in Arts and Science preceding admission and following completion. It is staffed in part by professors and in part by teachers seconded from school districts.

The program is sufficiently flexible and adaptable to be offered in almost any community where twelve or more qualified candidates are located. Thus, it is likely that the program can be offered continuously in the most populous communities and, perhaps, every third or fourth year in smaller ones. Degree completion studies for the B.Ed. would be taken from the university's Arts and Science courses and, as for the B.A. and B.Sc., would require the completion of concentrations in two disciplines.

Business — A program culminating in a Bachelor of Business Administration degree (B.B.A.) should be developed as soon as possible. There would appear to be a need for such a program from within the region and from other parts of B.C. Some 12,000 students have graduated from B.C. colleges and B.C.I.T. in business programs, in the past ten years and, as noted earlier, they currently have no academic alternative in B.C. other than to take the

full four years of a business degree; no transfer credit is awarded for the diploma. Some universities in other jurisdictions award full transfer credit for a business diploma. This program should also award full transfer credit.

The final two years of the B.B.A. would involve two elements: ten required business courses; and ten courses from Arts and Science. The ten business courses would cover the seven cognate areas of business studies plus courses in entrepreneurship, small business and, perhaps, computing. The ten courses from Arts and Science would be a combination of lower division and upper division courses designed to broaden the student's intellectual base.

Natural Resource Management — The development of a B.Sc. in resource management would appear to be both timely for the province and attractive to students. No bachelor's level program with this designation is currently available in B.C.

Students would enter this program after two years of Arts and Science which would include pre-requisite courses in Biology, Economics and Statistics. The final two years would involve a set program of twenty courses most of which would address topics basic to the general field of resource management and some of which would address more specialized aspects — Forestry, Fish/Wildlife, and Water Resources.

Though we have not studied the matter in detail, it may be possible to develop a program in forest resource management in association with the more general resource management program we propose. The five year degree might award full transfer credit for a college diploma in forestry. A fifth year of specialized courses could be added to the program we have proposed. The university should give serious attention to this possibility. Particular note should be taken of the excellent and instructive brief presented to us by the Northern Faculty of Forestry Committee.

Applied Computer Science — A four year program in applied computer science (B.Sc.) should be developed as soon as possible. There is an obvious shortage of training opportunities in B.C. in this discipline. At present graduates of college diploma programs are unable to obtain transfer credit at the universities; this program would award full transfer credit.

Years 3 and 4 would consist of twenty courses focused upon industrial needs such as process control applications in pulp and paper manufacturing. Given some variation in topics covered in college diploma programs, it would be necessary to provide some tailoring of programs for individual students. As might be expected, the program would place a major emphasis on mathematics.

Additional Professional and Applied Programs — The four professional and applied programs we have suggested should, we believe, be high priorities for consideration by the university. We have studied them in

detail and we have prepared tentative curricula to satisfy ourselves that they are workable. In addition, a number of other possibilities have come to our attention and, although we have not analyzed their prospects, the university should consider them and, if they prove feasible, they should be implemented on a phased basis. A five year forestry degree linked to the Resource Management Program and a degree completion program in Nursing are two promising candidates. Additional opportunities include social work, various aspects of health care, educational technology, specifically computer and other electronic applications, and certain specialized studies in engineering.

Aboriginal Studies and Provision for Native Students

An awareness of low participation rates in post-secondary education across the province has led to a growing public concern. This has resulted in significant initiatives on the part of government including the establishment of our committee. But if low participation rates for the population as a whole are a source of concern, participation rates from the native peoples should be a cause for alarm and deserve an even higher level of attention.

The problems to be faced are deep-seated and of long-standing; they do not lend themselves to easy and quick solutions. But the establishment of a new university in a region of substantial native population provides fresh grounds for optimism. It automatically removes certain barriers which have militated against the attendance of native students at the coastal universities: distance from home, cost, the need to move to urban centres, and the discomfort of studying in large and impersonal environments.

Thus, a new university in the North provides a unique opportunity for addressing the post secondary education concerns of the native communities. It is an opportunity which must not be lost. It is essential, however, that the university focus its energies on those matters it is best equipped to deal with and cooperate with the other institutions and agencies who play different roles: school boards, colleges, First Nations Councils, departments of government.

What we propose is a starting point, a foundation upon which future developments and opportunities can build. It must be recognized that at its beginnings, the university will be small and will have limited resources. We have six proposals which we consider to be vital, realistic and attainable.

First, we recommend that the university take tangible steps to acknowledge the contributions of the native peoples and to ensure that the institution is, as one submission suggested, "user-friendly". A wide variety of mechanisms are available for achieving these ends. The design of buildings, for example, could reflect native culture as could the naming of locations and structures on the campus. The development of an art collection and the encouragement of cultural events are other possibilities. There should be an active program to

recruit promising students and to support their continuance through the provision of scholarships, housing, academic assistance and the like.

Second, a Division of Aboriginal Studies, one of four such divisions within the Faculty of Arts and Science, should be established at the outset. In common with the other disciplines, it would offer an eighteen semester hour concentration in the upper division; its courses would be open to any qualified student and would include, for example, academic studies in aboriginal history, culture and art forms. The director of this division should be an early appointment to the faculty and could play a role in the attainment of the other five proposals we set forth. We have received submissions which recommended that a school or faculty of aboriginal studies be established at the outset. We believe, however, that the arrangement we suggest is preferable and, in any case, it does not rule out the later establishment of a larger administrative unit when such is warranted by enrolment demand.

Third, professional and applied programs should make provision, as appropriate, for meaningful involvement with the native communities. Cooperative education placements, for example, could be made in native communities. A module of the teacher education program we have described could be located in a native community if demand warranted it; another B.C. university located its program on the Mount Currie Reserve to the mutual satisfaction of all. Linkages with the Yinke Dene Language Institute should be actively pursued as a means of giving greater relevance to teacher education and curriculum development.

Fourth, topics and issues of relevance to the concerns of the native population should be included, as appropriate, within the university's courses. A course on the history of British Columbia, certain courses dealing with resource management, and certain courses in business could be instances of what we suggest.

Fifth, the university's activities in community service and continuing education should include the provision of services within native communities. Similarly, research activities of mutual interest to the native communities and the university should be fostered.

Finally, the university should encourage the development and participate in the operation of a regional body designed to coordinate and improve aboriginal educational services. Band councils, school boards, colleges, and departments of government—as well as the university—can make unique and necessary contributions. By assuming a strong leadership role, the university will encourage an active involvement of the wider community.

GRADUATE CURRICULUM

We believe that there are compelling reasons for including provision for advanced degrees in the northern university's curriculum. Masters and Doctoral degrees are needed by residents of the North. They will add immediately to the overall credibility of the institution—including the credibility of its undergraduate degrees. They are an essential condition for attracting the outstanding scholars upon whose achievements the university's reputation will be built. They will contribute directly to the research needs of the north and hence to its economic and social development. They will be complementary to the undergraduate curriculum.

Further, the university must be empowered, from the outset, to offer graduate degrees. The university must move as quickly as it can to address the full range of concerns in the North and the presence of graduate programs and graduate students will be powerful stimulants to its rapid development. Graduate degrees, even more so than undergraduate degrees, have built-in quality controls. Theses are evaluated by professors from other universities, and professors who supervise graduate students build and guard their professional standing by producing competent graduates.

Initially, programs should be developed in the professional and applied fields mentioned in the previous section — Education, Business Management, Computer Science, and Natural Resource Management. Each of these will be staffed by from six to eight professors and that would provide the necessary range of staffing and expertise. Some programs at the Master's level might be "cohort" programs with qualified students being admitted as a group and moving through a uniform set of courses but undertaking individual research projects. Other programs at the Master's level might depend less heavily on course work and instead would lay stress on individual tutorials and independent research. Doctoral programs for the relatively small numbers likely to be involved for some time need place very little reliance, if any, on course work. In fact, some excellent doctoral programs throughout the world require no courses at all, relying instead on the mentorship of the candidate's senior professors and the satisfactory completion of a major piece of independent research.

With the foregoing in mind, a Master of Education degree for practising professionals could be developed, perhaps similar in form and substance to the program that Simon Fraser University has offered at several interior locations including Prince George. As need dictated it could be offered in different locations over time. Similarly, an M.B.A. could be offered in several communities, given local need and interest. On the other hand, Masters and Doctoral programs in Resource Management and Computer Science have greater equipment and laboratory needs than the M. Ed. and M.B.A. These

programs would enrol smaller numbers of students and could not be offered regionally.

ENROLMENT ESTIMATES

The accurate prediction of enrolments in new institutions involves science, art and a good deal of luck. What appears on the face of it to be a straightforward exercise is bedeviled by numerous complexities. One could multiply the present population of the North by the national average percent university attendance rate and derive an enrolment estimate ranging from 4,000 to 6,000 students. If this were repeated for successive years, building in assumptions about population changes, one could produce a table of seeming accuracy. But is the Canadian average appropriate for the North? After all, an average hides wide regional variations. Further, is it reasonable to include all the residents of the North in the calculation? Many live at such great distances from any location where university programs could be made available that their attendance is unlikely. Similar problems emerge in estimating numbers of college or high school students who might attend the new university.

We have approached the problem in two quite different ways. First, we have applied the standard estimating procedures of demographers and educational planners. These involve making reasoned assumptions of participation rates from several groups of potential students. Since assumptions can be generous or conservative, we have produced two sets of estimates - a range of enrolment possibilities. This appears in Table I below. Details of our methodology can be found in Appendix C. The second approach we took was entirely different. Taking the curriculum we have described in the previous section of the report, we calculated the cost of operating the university once all the programs were phased in. Knowing that the university's revenue will be derived from per capita government grants and student fees, we determined the numbers of students that would be needed to generate the needed revenue. The results of this exercise are shown in Appendix D. Bear in mind that very low enrolment totals shown for the early years of operation result from a gradual phasing in of the entire curriculum. A more complete discussion of these two approaches follows.

Table I results from applying the widely used prediction methods of demographers and educational planners. The student population of the new university will be made up of four groups: northern students entering either directly from high school or transferring from colleges, mature students, graduate students, and out of region students. Estimates of enrolments from each sub-group involve the making of relevant reasoned assumptions. These include, as appropriate, estimates of the size of high school graduating classes, historic participation rates, anticipated changes in participation rates resulting from more convenient learning locations, participation rates in other regions, and so forth. Though only time will demonstrate the validity of the

assumptions we have used, they represent a consensus of several experts we have consulted and are consistent with the results of the market surveys we commissioned (Appendix B). As noted earlier, Appendix C makes explicit the methods used for generating the data in Table I.

TABLE I

Enrolment Estimates for a Northern University
(Full Time Equivalent Students)

	Conservative	Generous
* 1991	121	212
* 1992	292	536
* 1993	502	932
* 1994	742	1,412
1995	807	1,567
1996	872	1,737
1997	927	1,904
1998	992	2,070
1999	1,061	2,253

* Enrolment constrained by gradual phasing in of curriculum.

The presentation of two enrolment forecasts—conservative and generous—reflects the uncertainties and imponderables involved when a new institution is established. Will the new institution prove to be attractive to students who would otherwise go to the coast? Will northern high school and mature students who previously saw no possibility for continuing their studies for financial reasons now take advantage of a more accessible opportunity? Will B.C. students reverse the traditional north-south enrolment flow and come to the North in numbers significantly greater than the very modest ones we have predicted? Are there factors which have been overlooked in our prediction which could have positive affects on enrolment? The last two of these questions, in particular, deserve comment.

There are reasons for believing that out-of-region students will come North in numbers greater than we have predicted. For one thing, the assumption used to generate this enrolment rate was the weakest of any of those we used. This aside, the professional programs we have suggested, and in particular the transfer credit arrangements we recommend, will provide very attractive options

for students holding two year diplomas from BCIT and the provincial colleges. In addition to this, the new university may prove to be a desirable option for students who are encountering problems associated with severe enrolment pressures at the coastal universities. Gaining general admission to one of these universities is one thing; gaining entry to required or desired courses and programs is proving to be exceedingly difficult. And living accommodation, assuming it can be found, is becoming excessively expensive. These factors may result in higher than predicted enrolments in the North.

Another factor which may have significant impact on enrolment has to do with certain chronic and growing personnel shortages in the North. In nursing, for example, we have been told that there is a shortage of applicants for available positions, and positions, once filled, are subject to high attrition rates. Though supply/demand data need to be more fully developed, there appears to be a case for the new university to consider the early development of a degree completion program in health care. For similar reasons, the teacher education program may need to be expanded well beyond the numbers we have used in our estimates. The province as a whole is entering a period of acute teacher shortage. This is caused, overall, by a growing school population, by accelerating retirement rates among teachers and a shortage of training capacity. The situation in the North is exacerbated by difficulties in attracting teachers to available positions and by high attrition rates among those who come to the North. Since there is a strong tendency for teachers to seek positions close to localities they consider as home, there is a case to be made for a training capacity in the North significantly larger than we have used in our planning figures.

We have mentioned the well-established relationship between participation rates in university studies and students' proximity to a university. This is one reason for supporting the establishment of a university in the North. We have taken it into account in our enrolment forecasts by assuming that participation rates in the North will increase slowly over time from their current low levels to the currently rising provincial average. But opportunities for useful and interesting employment, perhaps as much as proximity to institutions, have a clearly documented influence on enrolments. Since, as appears to be the case, there are severe shortages of qualified northern applicants for positions in a variety of fields in the North, participation rates could well rise more rapidly than we have assumed. Obviously, if this occurs our enrolment forecasts will be seriously in error.

We have avoided the temptation to factor employment prospects into our forecasting calculations because we lacked statistically reliable means for doing so. Neither have we included the possibility that the university and its programs may prove to be more attractive than expected to out of region students. Instead, we have provided forecasts that will be difficult to challenge. In so doing, we recognize the strong possibility that we may have erred on the low side.

To summarize thus far, by employing traditional forecasting methods and using both conservative and generous assumptions, we have provided a range of enrolment projections for the first nine years of the new university's life. We have indicated that forecasts for the first four years were constrained by the phasing in of the curriculum we described. Finally, we have described two factors which could have a positive effect on enrolment but we have not quantified them and, thus, they are not taken into account in Table I.

The essential question which must now be answered is this: Given the enrolments we have predicted, will the university be viable and sustainable? This question is perhaps the most critical element within our terms of reference. There are two aspects of the university's viability: curricular viability and fiscal viability. We believe that we have demonstrated that the university will achieve curricular viability within about five years. In order to demonstrate fiscal viability we must show that operating costs and revenues will be in balance at some predictable timepoint. Thus, if we can now demonstrate fiscal viability and can predict increases in enrolment beyond the initial point of viability, we can assume the institution's sustainability.

We define fiscal viability as a situation in which the university's operating costs and revenues are in balance. Operating costs of B.C. universities are based, primarily, on the cost of offering the curriculum and providing the various services associated with it either directly or indirectly. Operating revenues, on the other hand, are based on per capita government grants and student fees. The basic per capita grant is weighted to reflect the costs associated with different programs. Speaking generally, Science is weighted more heavily than Arts, upper division more heavily than lower division, and graduate more heavily than undergraduate. In addition, our Terms of Reference permit us to include a thirty-five percent northern supplement to compensate for unusual costs and the absence of economies of scale in the North.

Operating costs were calculated for the fifth year following the university's establishment, the point at which the initial curriculum would be fully implemented. This was done by determining the numbers of professors that would be required to offer the various programs. With this base figure and by using estimating formulae applicable to Canadian and B.C. university operating budgets, a total operating cost figure was produced for the university.

Since revenue is derived from student fees and government grants weighted by program, we determined the student enrolment that would be necessary to generate revenue equal to the previously estimated costs. An enrolment of 898 full time equivalent students brought the budget calculation into balance. Details of the process just described are provided in Appendix D "Breakeven Simulation".

Does the foregoing simulation provide a reasonable basis for believing that the university will be fiscally viable? We believe it does. Table I shows a conservative estimate of 807 students in year five and 872 in year six. These estimates respectively fall eleven percent and three percent below our simulated figure of 898. Remembering that the simulated figure falls at the bottom of the conservative—generous prediction range and, further, that we have not quantified the potential impact of employment prospects and the university's possibilities for attracting out of region students, we feel confident in stating that the university will be fiscally viable within five or six years of its establishment. The probabilities of fiscal viability are very high indeed.

As a means of making a first approximation to operating expenditures, we have simulated the expenditures which might be expected if actual enrolments fell between our conservative—generous assumptions. This can be found in Appendix D.

GOVERNANCE OF THE UNIVERSITY

There are two aspects to the question of governance: the statutory and regulatory arrangements under which the university will operate; and the internal structures of the university which provide the basis for the university to govern itself. The first is a matter to be determined by government. The second will be a matter for the university to decide, subject to legislation and regulation. We will comment on each in turn.

We recommend that the new university be named within the University Act. This will require an amendment to the statute. The wording of the amendment should make it clear that the standing of the new university is equivalent to that of the three universities presently named. In our opinion, two additional amendments are required and these relate respectively to members of the Board of Governors and Senate who are appointed by the Lieutenant Governor in Council. We believe it is essential that members of these two bodies who are drawn from the general public be broadly representative of the region. The amendments should reflect this important consideration. We define the expression "broadly representative of the region" to mean that at least one member of the Board and one member of the Senate be from each of the following: the aboriginal communities, the northeastern region, the northwestern region and the northcentral region.

In addition to these statutory changes, the Province must provide the university with the necessary authority to conduct its affairs prior to the appointment of faculty and staff and the arrival of students. The University Act empowers the Board of Governors to perform a wide range of management functions including the appointment of a president; and it vests the academic governance of the university in the Senate.

The membership of these bodies, as prescribed by the Act, includes senior administrators, faculty, student and staff. Thus, it will be impossible for the university to fully constitute its Board and Senate for a period of time following its establishment. During this interval many vital management, administrative and academic decisions must be made, including the appointment of a president. The preferable solution to this dilemma, we believe, would be to create an Interim Board comprised of the eight required members that are appointed by the Lieutenant Governor in Council. The Interim Board would be given the powers of a normally constituted Board of Governors. Similarly, the powers of Senate could be vested in the Interim Board. Those powers, obviously, would be transferred to a properly constituted Senate at the earliest possible time. An appropriate legal means must be provided for dealing with the issues we have raised. One possibility for doing this would be through the promulgation of regulations under Section 88 of the University Act.

The internal governance and administrative structure of the university is, in part, defined by the Act. There must be a Board of Governors, a Senate, a Chancellor and a President/Vice-Chancellor. Mention is also made of Deans of Faculties, a Registrar and a Librarian. Beyond this, it will be for the President and Vice-Chancellor to determine the need for certain positions and structures. These will likely include an Academic Vice-President, a senior administrative officer, chairpersons or directors for sub units of faculties and so forth.

REGIONAL RELATIONSHIPS — THE COMMUNITY COLLEGES AND THE NEW UNIVERSITY

The addition of a university to the existing educational opportunities in northern British Columbia will create exciting possibilities for enhancing the overall level of educational and other services in the region. There is, however, a danger that this potential will not be fully realized if inter-institutional frictions and jealousies develop. Ways must be found to minimize this possibility.

We have met with the Boards and Faculties of the three northern colleges—College of New Caledonia, Northern Lights College and Northwest Community College—and we have listened carefully to what they have said. On the one hand there is positive but not universal support for the establishment of a university. On the other hand, there is concern that the presence of the new university may diminish the role of the colleges and adversely affect the programs and services available to students.

It is understandable that college boards and faculties may view the establishment of the new university with some apprehension. But we believe that apprehension should give place to optimism. For one thing, the presence of the university will almost certainly increase overall student participation rates in the region, and this will beneficially affect college enrolments. For another,

the university will provide additional and accessible learning opportunities for students in college districts. For yet another, the resources of the university will make possible an enlarged array of course options in certain program areas in which the colleges have had difficulty. This does not mean that the colleges will necessarily remain unchanged by the advent of the university. Rather, it means that, following thoughtful analysis, responsibilities may have to be shared in different ways. An examination of current enrolments in the region provides a starting point for this analysis.

The numbers of full-time equivalent students enrolled in the university transfer programs of the colleges in 1988 - 89 are shown in Table II. Some obvious points emerge.

TABLE II
1988 - 89 University Transfer
Fulltime Equivalent Students in Northern Colleges

	Full Time Equivalent Students		
	Total (actual)	Year 1 (est.)	Year 2 (est.)
New Caledonia	728	612	116
Northern Lights	206	174	32
Northwest	123	112	11
Totals	1,057	898	159

The total number (1,057) is substantial but there is wide variation among the colleges. There is a sharp drop-off in enrolment from Year 1 to Year 2 at all colleges but it is particularly dramatic at Northern Lights and Northwest. First year enrolments at New Caledonia are sufficiently large to justify a reasonable array of course offerings. First year enrolments at Northern Lights and particularly Northwest are low and it is difficult to offer other than a limited curriculum without incurring very high costs. Second year enrolments at New Caledonia warrant a fair range of course offerings but probably insufficient to satisfy the needs of a good many students seeking entry to the third year programs of universities. Second year enrolments at Northwest and Northern Lights are so small as to justify only token course offerings.

But the colleges undoubtedly realize that there is another and more optimistic side to the enrolment question and it is this: The newly arrived presence of university degree programs in the region will increase overall enrolments in the post-secondary educational system of northern British Columbia. Of this there can be no question. Less certain, of course, is the magnitude of increase, its timing, its location and the programs it will most affect. Some students who would otherwise have moved to a coastal university will now be able to fulfill their ambitions close to home. Others, including mature students, who saw little point in continuing their education in the absence of realizable degree opportunities close to home, will enrol either in one

of the colleges or in the university. Not only academic program enrolments, but also college diploma program enrolments will be positively influenced, assuming that the university awards two years' credit for a two year diploma as we believe it should. Thus, in our view, it is a virtual certainty that the presence of the university will enhance enrolments overall in the North. But it will be necessary to harmonize the academic course offerings of the university and the colleges. Unless this is done resources will be wasted and the best interests of students will not be served. We believe that it is possible to achieve a higher standard of academic service to students together with improved operating efficiencies without seriously affecting the colleges. In fact, given the predicted increase in overall enrolment, there need be no losers.

Our recommendations concerning a realignment of responsibility in the offering of university transfer courses is different for Northern Lights and Northwest than for New Caledonia and, thus, the two cases will be discussed separately.

In the case of Northwest and Northern Lights we recommend that each college continue to offer the first year university transfer program. The university may be able to offer some assistance in broadening the range of course offerings. In the case of the second year program of the two colleges, we recommend that the university assume responsibility for its offering. The current enrolments are clearly too low to permit more than token offerings and the university's regional course delivery system should make possible an enhanced array of courses. As well, the university should ensure that those faculty members who offered second year courses during 1989-90 are not adversely affected by this change. This arrangement would be phased out, of course, as the faculty members are redeployed to other functions by the colleges.

The situation involving New Caledonia is more complex than at the other two colleges; additional factors are involved in defining the college/university relationship. For one thing, the significantly larger enrolments, particularly in first year provide additional planning options. For another, the main campuses of the two institutions will be in the same city. For yet another, the impact of the university on student participation rates in the college's region is likely to be greater both proportionally and in absolute numbers than at the smaller colleges—certainly during the early years. There will thus be a need for additional capital facilities at the college at the same time that the university has major capital requirements for its initial major facilities. Finally, it would be anomalous for any university not to have course offerings at the first and second year.

With the foregoing in mind, we have two recommendations. First, both the university and the college should offer the first year of the academic program. Current enrolments are sufficient to justify this and future growth is likely. Further, this would preserve one of the unique and important features of the

B.C. college system; first year academic programs admit many students who cannot qualify for university admission and provide them with opportunities and support to overcome their deficiencies. This desirable practice, for which the college is particularly suited, should be continued. Those first year students who qualify for admission to the university should have the option of attending either institution. Approximately half of the first year university transfer students at the college are currently in this latter category.

Second, we recommend that the university be given full responsibility for second year studies. There are several justifications for this action. For one thing, it is likely that the most significant enrolment increase will occur in second year as students prepare themselves for the now available degree completion programs. It seems logical for the necessary expansion of services to occur at the university rather than at the college which likely would be experiencing enrolment pressures in the first year and in other programs. For another, the university, in any case would need to offer some second year courses to satisfy the needs of its students and programs. Further, the faculty members needed to teach second year students would provide the university with the additional faculty it will need to assist in the delivery of courses throughout the North.

The collective effect of our recommendations concerning the three colleges, we believe, will be to significantly improve access to programs for students and to achieve improved economies of scale. At Northwest and Northern Lights, the minor impact on enrolments will likely be more than offset by enrolment increases resulting from rising participation rates. The more major changes at New Caledonia are similarly likely to be offset by enrolment increases in other programs but if they are not fully offset initially, steps should be taken to ensure the welfare of faculty who would be affected. This could include secondments to the university or the offering of faculty appointments to qualified college faculty. In any case, changes will not come about the instant the university is established and personnel adjustments can be taken into account during the university's initial planning phase.

It will be necessary for the Ministry to give effect to our recommendations. Beyond this, it will be necessary for the four institutions to work cooperatively to achieve the end of providing students with the broadest array of educational services possible and at the highest level of educational effectiveness and cost efficiency. Lines of authority and responsibility will be much clearer when the university assumes the task of ensuring the delivery of second year courses. But there will be a continuing need to develop course delivery schedules that meet the needs of college students who intend to transfer to the university and university students who are studying in regional locations. There will be a clear need for coordination of effort.

We have considered several ways by which effective cooperation between and among the institutions could be ensured. One possibility we examined and

rejected would have seen the creation of a body, by statute or regulation, that would have had the power to force needed rationalizations on the institutions. This, we fear, would have done little to encourage cooperative working relationships and could have resulted in unnecessarily convoluted, legalistic and time-consuming decision making. More realistic and workable would be to hold regular, informal meetings of officials from the four institutions where planning and operating information would be exchanged; less regular meetings should be held between the university and a given college at which specific problems, including the sharing of resources, could be resolved. Aside from the common sense of this arrangement, there is a natural constraint that will work in its favour—the annual budgetary review. In order to secure budget approval by the Ministry, each institution must demonstrate that existing programs are functioning as efficiently as possible and that the addition of new programs and courses is justified. Instances of wasteful duplication and self-serving will be readily apparent and the related budget element will be disallowed.

Despite our belief that the four institutions will be able to resolve their differences by informal means and out of enlightened self-interest, one formal procedure should be followed. The Minister should require the university (and perhaps each college) to submit an annual report describing the curriculum problems encountered at each college and the successes or failures in resolving them. This would be a useful discipline for the university and would provide the Minister with helpful insights. Incidentally, the Minister has statutory authority to make such a request. Section 46.2 reads—

> At the request of the Minister, a university shall provide the Minister with reports and any other information that the Minister considers necessary to carry out his responsibilities in relation to the universities.

At the risk of making this section of our report overly long we feel it necessary to give our views on the ground rules under which inter-institutional problem solving should occur. We do this because we feel the matter is of critical importance to the success of the university and the well-being of the colleges.

First of all, the colleges should be free to offer their curricula by methods and at times and places they deem appropriate, subject to budgetary constraints. The colleges may choose to modify courses and programs in order that students obtain maximum transfer credits. If they choose not to, they should not expect the university to award credit for courses that do not meet its requirements. This is established practice in British Columbia.

Second, the university should have full control of its courses and programs from Years 1 to 4. It should develop and publish a full listing of course descriptions and requirements. To the fullest extent that academic

considerations permit, the university's first year courses should match the content of parallel courses in the colleges; this will simplify the process of credit transfer. Although the university should not offer first year courses in direct competition with the colleges, it must be free to offer, or make arrangements for the offering of specific courses needed by its students or potential students if a college is unable to offer the courses at the time and place required by the university.

Third, given the contents of Table II and the discussion which accompanied it, it is unlikely that the colleges' first year curricula will contain all the courses which are required by the university. Where gaps occur, the university will offer or arrange for the offering of the necessary courses.

These three ground rules illustrate a sensible basis for encouraging positive inter-institutional relationships. They preserve each institution's autonomy while providing a framework for solving problems and negotiating differences. They will increase students' access to courses and they encourage the prudent use of public funds.

THE REGIONAL DELIVERY OF COURSES AND PROGRAMS

We have made it clear that the new university is intended to serve Northern British Columbia, not just a single location. To achieve this end it must make its services accessible to an enormous geographic area, one which is roughly twice the size of Great Britain. It must make programs and courses as widely available as academic and budgetary constraints permit. As well as providing conventional lectures in several locations to appropriately sized groups of students, it must develop or acquire innovative and ingenious procedures for providing high quality instruction to very small groups and even individuals. It cannot do everything itself and must therefore plan cooperatively with several institutions, including the colleges. This is a very tall order but it is also an exciting challenge.

No university can be a collection of small bits and pieces sprinkled throughout a region. That would be unworkable. Instead, and perhaps paradoxically, the new university must be provided with a major headquarters campus in order to fulfil its mission of dispersing services. In addition, physical presences of varying size and complexity should be placed in several other northern communities. But administrative functions—registration and record keeping and finance, for example, must be centralized. Academic planning, coordination and governance must have a common locus. The university's major computing capability and library collection must be at a central location. Specialized research laboratories with the essential technical and inventory back-up must be in one place. Some programs, certainly those

heavily dependent on equipment, can only be offered at one central location. And students from the immediate vicinity need to be accommodated.

As well as containing the services and capabilities just mentioned, the central campus will bring together the necessary critical mass of people—professors, technical experts, graduate and undergraduate students. A university is much more than a collection of buildings and equipment. It is a community of scholars committed to the preservation and refinement of existing knowledge and the discovery of new knowledge. This sense of purpose and commitment must also be shared with colleagues in the smaller centres, both professors and students. Without it the full value of the university will not be realized; university degrees are much more than the accumulation of required course credits. In this the university faces a difficult even a daunting task; but the starting point is the delivery of courses and programs. How might this be done?

Among the professional programs we have recommended, a clone of Simon Fraser University's Professional Development Program is particularly suitable for regional delivery. As experience has shown, it can be offered effectively in virtually any community in which there are twelve or more qualified candidates. Similarly, an M.Ed. program has been offered in several B.C. communities by one of our universities. There seems to be no reason why the new university could not do the same wherever there is sufficient interest. This might also be true for an M.B.A. program though this degree has not previously been offered off-campus by a B.C. university. Modifications to the normal campus class schedule of these programs would remove some problems of in-region travel without compromising academic quality; classes might meet less frequently during the semester but for longer time periods. In addition to this, the field work or cooperative education components of certain undergraduate professional programs could likely be undertaken in a student's home community if a suitable placement were available. M.Sc. and Ph.D. programs and certain undergraduate professional programs, however, would need to be taken at the main centre because of the need for specialized facilities and equipment.

Aside from laboratory courses, most of the undergraduate curriculum in Arts and Science could be made available throughout the region by a variety of means. The university need not provide courses from its curriculum which are being offered by the colleges. Further, the courses of the Open University would be available for individual students in remote locations. But for courses not within the colleges' curricula, the university could make instructional arrangements depending on the numbers of students desiring a particular course. For groups of, say, ten students, a professor might travel to the community and teach the course on a weekly or bi-weekly basis. Alternatively, a suitably qualified local resident—perhaps a college instructor—could be hired to teach the course.

For groups smaller than ten there are a number of possibilities. The university might provide the students with course materials from the Open University together with a part-time tutor. Alternatively, several small groups undertaking the same course could be linked electronically by means of slow-scan television, electronic blackboards and the telephone. Numerous other possibilities could be developed through the use of electronic mail, facsimile machines and other emerging technologies.

Although the university must control the regional delivery of its programs, it need not rely solely on its own resources. The university could, for example, co-operate with the Open Learning Agency (OLA) and other similar institutions. Such cooperation could include the provision of self-instructional course materials, the gaining of access to OLA's developing array of electronic networks including the Knowledge Network, and the provision of technical advice in the delivery of courses to remote locations. Cooperation with OLA would also provide access to course materials produced by other universities including B.C.'s coastal universities. Though these materials are designed primarily for individual learners, they can be used to good advantage by groups of learners that are too small to warrant the provision of a full-time instructor—a situation which is likely to occur with some frequency in the North.

The foregoing listing of approaches to course delivery in the North is intended neither to be exhaustive nor prescriptive, merely illustrative. Nevertheless, we have shown, we believe, that it will be feasible for the university to engage in the regional delivery of a significant number of its courses and programs. Undoubtedly, it will develop more imaginative arrangements than we have suggested.

Two other matters should be mentioned. First, the development of university centres in several northern communities will be a necessity. The nature of the required physical facilities will be discussed in a later section of this report. For now we will delineate the functions of university centres. There will be a need for classrooms and study space. Provision must be made for housing a basic library collection. An advising service must be provided both to assist students with program and course selection and to inform the university's planning process for scheduling future course offerings. Registration and financial services must be available. Electronic linkages of various kinds must be provided for instructional and administrative purposes. These are the minimum requirements and functions if university centres are to become effective staging points for course delivery in the sub-regions of the North.

Second, there must be a general recognition of the enormous logistical and administrative complexities of regional delivery. For one thing, the university must develop long term schedules of course offerings taking into account student needs, the availability of competent faculty, and budget. Not an easy task. Even given this, the expectations of students must be tempered by the

realization that the university will never be able to offer every course they desire at times and places that are convenient.

FACULTY AND INSTRUCTIONAL STAFF

The new university will be judged ultimately by the quality of its faculty and staff. This judgement will be based primarily on the success of graduates and the intellectual achievements of professors, and to a lesser but still important extent, by the impact the university has on the North. It follows that the university must attract and retain professors of the highest competence.

There has always been a shortage of truly outstanding professors and competition to obtain their services is vigorous to say the least. That aside, there is a rapidly developing shortage of high quality applicants for positions in universities across North America; the shortage is already acute in certain areas of high demand. The shortage is occasioned by three factors: an ageing professoriate which is retiring in increasing numbers; growing enrolments in universities; and insufficient numbers of Ph.D.'s being produced by universities. The new university will enter a tight hiring market.

In addition to the problem of a shrinking talent pool, the university is likely to encounter a reluctance on the part of some potential candidates to come to a new and relatively small university with high hopes but no track record, located in an area of small population, and a region which is perceived to be isolated and lacking in cultural amenities and professional opportunities. Those are the realities which will be encountered in recruiting faculty.

Undoubtedly the university will be unable to obtain the services of certain individuals who could make excellent contributions. But it is equally certain that the university will be able to attract many highly competent and energetic professors who are intrigued by the very features of the situation which discourage others. It is not often, for example, that there is an opportunity to be involved in the development of a new university. Similarly there are successful professors in established universities who desire fresh challenges and new beginnings. As well there are those who would welcome the chance to exchange the amenities together with the congestion of a large city for a somewhat simpler lifestyle and open space. More favourable housing costs and a wide variety of accessible recreational opportunities will be important factors for still others.

Once the university has attracted scholars to the North it must provide an environment which will encourage and reward their achievements. Salaries, benefits, terms of appointment and opportunities for various forms of professional development must be available as they are elsewhere. But special provision must be made for the unique problems resulting from the newness and relative isolation of the university. Travel allowances for attendance at

professional meetings, for example, will need to be set at a higher level than in the other B.C. universities. Provision must also be made to bring visiting scholars to the North to share their knowledge with students, faculty and the wider community. During the start-up phase there will be shortages of laboratory space and equipment; these must be addressed energetically or research productivity will suffer. For similar reasons, the development of essential library holdings must be put on fast-track. In this regard, since it will be several years before the library reaches minimum acceptable levels, arrangements for inter-library loan and ready access to the growing number of electronic databases must be a high priority. Generous provision must be made for electronic mail and facsimile transmission in order to compensate for the absence of daily contact with colleagues which is available on larger campuses.

The university should also give careful thought to the structure of its faculty. For one thing, not all positions need be filled at conventional ranks—assistant, associate, full professors—though these should be the major core. The teacher education program we have suggested, for example, has drawn vitality and flexibility from its staffing pattern; it uses a combination of professors and outstanding school teachers, the latter being seconded from school districts under short term contracts. At one B.C. university, a master's degree program in a broad and complex field is offered by only six professors. But the expertise available to students is much broader than the six professors could possibly provide. Twelve associate faculty drawn from other departments, and fifteen adjunct professors from government, industry and other universities provide the program with an enviable array of talent. In a similar way, the new university should develop imaginative ways of using the academic and professional expertise already available in the community. For example, researchers from government and industry would be worthy members of thesis committees. Certain specialized professional topics for which full-time teaching positions cannot be justified could be taught by professionals from the local community.

We could provide additional illustrations of how the university's instructional staff might be structured. Novel and effective arrangements could be made for handling the regional delivery of courses, for instance. But we believe we have made our essential point; through imaginative planning, the array of expertise available to students can be much broader than if narrowly conventional procedures were used.

THE NEED FOR COMMUNITY SUPPORT AND COOPERATION

The establishment of the University of the North is expected to bring a broad range of new and improved services to the region. Obviously, there will be new opportunities for formal learning. As well, there will be an infusion of fresh and, at times, uncomfortable ideas resulting from the research and

scholarship of students and professors. In addition, the university and its members will undoubtedly be asked to contribute to numerous aspects of community life. In short, community expectations are very high, too high perhaps for the university to fulfill without the active and on-going moral and tangible support of the community.

The community must realize, for instance, that the university will not spring full-blown into existence the instant it is established by government. A president must be found and hired and he or she must search for senior colleagues. An enormous variety of activities must then be undertaken in respect of hiring, programs, facilities, policies and the like. Though it may be possible to enrol a limited number of students into certain programs within a couple of years it will take perhaps five years for a curriculum somewhat like the one we have suggested to become fully operational. And that will only be a start because additional programs will need to be instituted and, most important of all, the university must set about the task of building the reputation for excellence upon which the success of its graduates and the quality of its services to the community depend. The community must be patient and supportive as the university develops.

But community support must be tangible as well as moral. The government will, of course, provide the necessary start-up funds and will assume operating costs on the same basis as for the established universities but at a somewhat higher level. As well, it will provide the capital costs of buildings and equipment. But that will not be the end of the university's financial needs. In fact, all of the existing B.C. universities have found it necessary to mount major fund raising campaigns in order to augment their resources. UBC, for example, has already raised the major portion of its multi-million dollar campaign target; and the government has promised to match the funds raised. It should be realized that UBC and, to a lesser extent, UVic and SFU, already have large numbers of scholarships and endowments. These institutions also have alumni associations who play active roles in fund raising and general support.

In contrast, the new university, initially, will have to rely mainly on government grants and tuition fees. Thus, without the generous financial support of residents of the North, its development will be hindered. But if the same level of enthusiasm that was directed to persuading the government to establish the university of the North is now directed to the provision of badly needed resources, the new university will reach the desired level of quality and maturity more quickly. Major corporations can be expected to play their part; but so must community groups and individuals. It will be a high challenge.

The new university will, of course, specify the purposes to which funds would be put. Included in this list will unquestionably be student scholarships. Both outstanding and deserving students must be provided with scholarship funds; otherwise they will either be unable to continue their education or they

will go to another institution which can provide assistance. The endowment of chairs in fields specified by the university will be another necessity because it will allow the university to have outstanding scholars on staff for shorter or longer periods without prejudicing its operating budget. This will be a costly business: $1.2 million to endow a chair, with half provided by donations and half by matching government grants. But it should also yield academic dividends by increasing the university's research productivity and reputation. The university library, for the foreseeable future, will need funds to supplement its regular acquisition budget. Even mature libraries are in constant need of funds to acquire special collections that become available. The development of a collection of northern historical materials might be a project that would attract the interest of a community group. These three examples serve only to illustrate in an incomplete way the need for supplementary funds.

There will be opportunities for the university to share in the development or use of major facilities. Government and industrial research laboratories, for example, could be located on university land. Arrangements like this at UBC have proven beneficial both to the staffs of the laboratories and the professors and graduate students of the university. Similarly, the joint development of recreational and cultural facilities could simultaneously benefit the university and the community; by joining forces, the two agencies could enjoy amenities superior to those which could be obtained singly. As another example, joint ventures in the building of university residences could be mutually advantageous to the university and the community. During the summer semester, surplus space could be used for a wide range of activities. These are only a sampling of possibilities. But they serve to illustrate that the facilities and equipment available to students and faculty need not be limited to what can be acquired through the capital budget provided by the government. Cooperation of the kind we visualize can create exciting possibilities for the university and the region.

Cooperation in the sharing of human resources could also provide opportunities for the development of mutually beneficial relationships. The university will have viable but rather small groups of faculty in its several cognate areas. At the same time, sprinkled throughout the region, there are many individuals possessing qualifications, credentials and experience of the highest order, some employed by other educational institutions, others by government or industry, and still others self-employed. Arrangements both formal and informal could make this talent available to the university. At the same time, and as experience in other universities has amply demonstrated, the new participants receive the intellectual and professional stimulation which their normal duties may not always provide.

There are many other areas in which cooperation could occur but one, in particular, should be mentioned. Students, especially those in professional programs, benefit greatly from direct contact with the activities of the field they seek to enter. Aspiring teachers, for example, combine theoretical studies at the

universities with practical activities in classrooms. Increasingly, other fields of study are employing similar practices under a program called cooperative education. We strongly recommend that the university employ this practice. Obviously, this will require the provision of appropriate placements in community agencies, business and industry and we have received positive indications that they will be available. Once again, we believe that cooperation will yield benefits to both sides.

FACILITIES

In studying the question of facilities for the new university, we have divided the problem into four elements. First, there will be a need to provide for the temporary accommodation of students, faculty and administration until permanent accommodation is ready for occupancy. Second, a site for the main campus must be acquired. Third, a building program for the main campus must be developed, the site prepared and construction undertaken. Finally, a number of regional university centres must be provided. Each element will be discussed in turn.

TEMPORARY ACCOMMODATION

Space needs immediately following the University's establishment will be modest and could probably be satisfied with rental accommodation. A handful of offices, a boardroom and some good quality warehouse space for staging a developing library would probably suffice. With the appointment of the President, however, the need for space will accelerate sharply, first with the arrival of senior faculty and staff, then with the addition of more junior faculty and staff, and finally with the arrival of students and additional faculty.

The Board and Principal of the College of New Caledonia have expressed a willingness to share space with the University during this difficult period but the College will have its own space problems. Thus, it will be necessary to make temporary arrangements, possibly through the use of demountable or relocatable structures.

It will be a matter of the greatest urgency for the Interim Board to make these temporary arrangements and to move as quickly as possible to acquire a permanent site and develop the required building program. Anything less will place the University at serious risk and obviously will inhibit its development.

SITE ACQUISITION

We did not consider it appropriate for us to provide advice on potential sites in the Prince George area; this is more properly a matter for the Interim Board. Nevertheless, we have a number of observations which we hope will be treated with the utmost seriousness. First, the site should be capable of serving a

potential enrolment of 6,000 FTE students. Though it will be many years before this figure is reached, it may be very difficult in the future to add new acreage to an inadequate site obtained today. The University of Lethbridge, for example, was once considered "land rich" but some twenty years later it has utilized over half of its usable land.

Second, the site should be capable of accommodating research laboratories and institutes whose presence will benefit the research activities of professors and students. The enriching presence of government and industrial laboratories at UBC and SFU is widely acknowledged. It would not be possible without the necessary land.

Third, we have mentioned the benefits that could be derived by the University and the community from the joint development of recreational and cultural facilities. Again, this will be possible only if a sufficiently large site is acquired.

It is our opinion that a site of 100 hectares (250 acres) would be minimal. One which is twice that should be sought. It would certainly not be too large if participation rates in the North reach current provincial levels. On this basis, an enrolment of 6,000 FTEs is not out of the question.

We would also emphasize the importance of working closely with municipal and provincial authorities in both site acquisition and site development. The development of the main campus will have a profound influence on its surroundings and every effort should be made to maximize the opportunities it presents and to minimize the problems and disruptions it could cause.

THE MAIN CAMPUS

We retained the services of professional consultants to advise on matters of site preparation and a construction program. Obviously we did not request an architectural study. Rather we obtained cost estimates based on enrolment estimates, a curriculum approximately the "shape" of the one we have described, and prevailing standards of university construction including such matters as per student space provision and building utilization.

Details of the University's actual requirements, of course, must await decisions concerning curriculum and related matters. But this does not detract seriously from the advice we received because square footage cost rather than building configuration is the major determinant of financial requirements.

We sought a professional review of the consultant's report and there was little disagreement. A summary of the report can be found in Appendix E.

REGIONAL UNIVERSITY CENTRES

Earlier in the report, we have recommended the establishment of university centres at several locations in the North. They will be necessary staging points for the regional delivery of courses and programs.

It is possible that the centres we visualize could be located adjacent to existing colleges. Alternatively, and assuming that colleges have surplus space, the centres could be housed, at least initially, in college facilities. Centres need not be large or elaborate facilities, but must contain a number of classrooms, library and study space, offices for faculty and academic advisors and a variety of electronic linkages.

IMPLEMENTATION

The purpose of this section of our report is to provide general advice and comment on some of the steps which must be taken to move the university forward from the time it is established until it is ready to admit its first students. We base our remarks on two assumptions: that the government decides to accept our recommendation that a university be established; and that the university is similar in form and function to the one we have described in this report.

The time from the establishment of the university to the admission of students can be divided into three periods. First, there will be a period during which the government undertakes a series of initiatives including, obviously, the establishment of the university and the appointment of the Board of Governors. Second, there will be a period during which the Board assumes responsibility for the university and, in particular, searches for and appoints the President. Third, there will be a period—the most intense of the three—during which the President will prepare an academic plan and deal with the multitude of personnel and organizational details required. These three will now be discussed in turn.

REQUIRED GOVERNMENT ACTION

Once the government has decided to establish a university in the North, it must make the necessary statutory and regulatory provisions. Our suggestions on these are included in an earlier section entitled "Governance". At a minimum, statutory provisions will involve amendments to the University Act which will have the effect of providing the new university with a standing equivalent to that of the three universities already named in the Act and of ensuring the regional representativeness of those members of the Board and Senate who are appointed by the Lieutenant Governor in Council. Legal provision must also be made, perhaps by regulation under Section 88 of the

Act, to create an Interim Board of Governors and to provide it with the full powers of both Board and Senate.

The government should then appoint the Interim Board of Governors, bearing in mind our earlier comments concerning aboriginal and regional representation. It would be appropriate to name the first Chairman of the Board, recognizing in the appointment the many and time-consuming duties that this person must discharge until a president has been appointed and becomes available. Funds should be made available immediately for the Board's operating expenses.

Appropriate fiscal provision must be made for anticipated operating, start-up, capital and site acquisition costs.

As well, the university's role in the offering of first and second year academic courses should be made clear to all concerned. Our suggestions on this complex matter are explained in the earlier section of this report—"Regional Relationships - The Community Colleges and The New University". Since the university will not be able to assume its responsibility for offering first and second year courses for several years, the colleges should be provided with the funds necessary to discharge the teaching responsibilities which will subsequently be assumed by the university. The colleges should avoid making long-term commitments to new faculty appointees who might be affected by the changed circumstances.

THE ROLE OF THE INTERIM BOARD - PRIOR TO THE APPOINTMENT OF THE PRESIDENT

Assuming that our suggestions have been followed, the full powers of both the Board of Governors and the Senate will be vested in the Interim Board. Care should be taken, however, to avoid the exercise of certain of these powers until the President has joined the Board membership. The appointment of senior staff and faculty, the promulgation of academic personnel policies, and decisions concerning curriculum most definitely should not be undertaken without the recommendation of the President. To the fullest extent possible, the Interim Board should avoid those actions which would encumber the President in the discharge of his or her duties.

Nevertheless, there are many matters upon which the Interim Board must take action. The most important and pressing of these is the appointment of the President. The critical importance of a wise choice cannot be over-emphasized. There are heavy demands on the time and energy of university presidents in established institutions. The demands on the President of the new university and one with unique challenges will be very heavy—at times excessive. The Interim Board may choose to use the services of a personnel consultant in its search. It should also consider retaining the services of a senior academic

adviser on a part-time basis. An appropriate person could provide wise counsel on this and many other matters.

In addition to appointing the President, the Interim Board must acquire a building site and must make provision for the housing of faculty and students until the core facilities are ready for occupancy. These are matters of considerable urgency. As well, preliminary planning for facility and curriculum development should be commenced by a small planning staff appointed, ideally, on a short term or seconded basis. The data and plans developed by this means should assist the new President with the decisions that must be made as soon as possible after his or her arrival. A fund raising campaign should also be initiated.

During this period, the Interim Board should attempt to maintain public interest in the university. One possible way of doing this would be to offer membership in convocation to interested members of the community. Convocation is widely thought to be a body comprised of faculty and graduates of the university. Section 5 (1)(f) of the University Act, however, gives the Senate the power to add names to the roll of convocation. The Interim Board, using its temporary powers as Senate, could take this action. Among other things, this would provide the university with a formal constituency, one it would lack in the absence of graduates and an alumni association.

ACTIVITIES FOLLOWING THE APPOINTMENT OF THE PRESIDENT

The search for and selection of a president can be a lengthy process. Further, once the position has been accepted, it may be some time before the new president can be released from his or her current assignment. Every step must be taken to accelerate this process including, if necessary, the engaging of the President in certain decisions even prior to his or her arrival at the university.

Senior staff and faculty must be recruited, the initial curriculum must be determined, policies and regulations relating to students, faculty and staff must be developed, and cooperative relationships with the other universities must be established. These are but a few of the matters with which the President must be directly involved and, initially, there will be very few colleagues to assist with the task. As well, the Interim Board and the President must develop an effective and harmonious working relationship. At the same time, the President must attempt to meet community expectations for information concerning the university's programs and method of operation. Finally, matters too numerous to mention will compete for any remaining time available.

The essential point to be made from all of the foregoing is this: once the university is established there is an enormous amount of work to be done before the university is able to admit its first students. Community expectations and

enthusiasm must be tempered by this reality. Patience, understanding and support will be required because there is no such thing as an instant university.

A VISION OF THE FUTURE

Thus far in our report we have attended scrupulously to our terms of reference. We have recommended the establishment of a university that we believe will be viable and sustainable both financially and from the point of view of enrolment. We have suggested an initial curriculum that can be mounted at an acceptable level of academic quality and within realistic financial expectations. We have provided illustrations concerning numerous operational matters not as a means of directing the university's development but as a way of demonstrating that workable solutions are available for dealing with the organizational complexities the university will face. We have assiduously resisted the temptation to be overly optimistic and, if anything, we have understated our case. In the interests of providing government with defensible, realistic and responsible recommendations, we may be charged with being too cautious. We accept that possibility because we felt it essential to be able to state that there is a high probability that the new university will exceed our expectations and, thus, that the investment of significant amounts of public money is warranted and is not at risk.

Our caution, however, should not be taken for pessimism. On the contrary, as our analyses started to yield increasingly positive results, we often speculated with considerable optimism on what the future held for the University of the North. We felt it important to communicate our sense of excitement as a means of encouraging others to share in a vision of what is possible. What better way than to imagine the speech given by the University's President to the graduating class of 2015 AD. In passing, it is worth noting that the new, "instant" universities in British Columbia, UVic and SFU will celebrate their twenty-fifth anniversaries in 1990.

President's Address
To The Graduating Class of 2015
University of the North
June, 2015

This important and happy occasion marks the twenty-fifth anniversary of our establishment as British Columbia's fourth university. From our small, rather humble and struggling beginnings we have reached a point where, with profit, we can pause for a moment to examine our achievements. Let me give a few examples from among the many I could have chosen.

First of all we have become a truly regional university. From our crowded headquarters and through our growing numbers of university centres and research stations we are providing a range of educational and research services

which, in 1990, no one thought would be possible. For example, partly as a result of the technologies created by our professors, we are now able to reach into the homes of our most remote communities with a wide range of high quality courses. Lectures and seminars continue to be vital elements of instruction in our classrooms but their educational benefits have been extended to individuals linked together by electronic means. As a consequence, course completion rates of isolated learners have risen dramatically from the old days of distance education, frequently exceeding those of campus students.

But we have become more than a regional university; we are now a provincial university in the fullest sense of the term. This year our enrolment exceeded 6,000 full time equivalent students. Of these, twenty percent were from other parts of British Columbia. Some come to us because of the unique professional programs we offer and others enrol in Arts and Science because of the excellent reputation we have developed for high quality and intellectually demanding teaching. Growing numbers of our graduates are proceeding to advanced degrees here and at some of the most prestigious universities in the world. At the same time we receive applications for graduate study from outstanding university graduates from B.C., Canada and beyond.

I would like to take particular note of the intellectual and professional achievements of our students and professors. This year saw the naming of our third Rhodes Scholar. The award of this prestigious and highly sought after scholarship indicates that our students are among the best in the country. Similarly, our professors are now receiving more than a fair share of distinctions—presidencies of national academic bodies, awards of distinction, major fellowships and the like. And our academic achievements are not limited to a small number of outstanding scholars. In fact, this year, research grants and awards received by our professors significantly exceeded the national average of all universities on a per capita basis. This should be a source of individual and collective pride.

In addition, and of great and growing significance to the North, is the impact of our research activities on the region's social and economic development. You are aware, I'm sure, of our forest technology laboratory, a joint venture with industry and government. Basic and applied research has given new life to a resource once thought to be in danger of serious depletion. Regional growth in secondary industry and the knowledge industry has greatly increased opportunities for northern residents. And the contributions of our scholars in the humanities and social sciences have added significantly to the quality of life in the North.

Earlier in my remarks I mentioned certain aspects of our uniqueness as a university. Another element of this uniqueness is the level of community support that our university enjoys. It is without parallel. It is characterized by a sense of common purpose exemplified best, perhaps, by our annual Festival of the Arts and Sciences. Last year, the fifteenth occasion the event was held, was

the best and biggest so far. The month-long series of musical performances, plays, public lectures, workshops, and professional seminars was held in ten locations throughout the North and was attended by individuals from as far away as Europe and Asia. The joint use of community and university facilities, including our residences, made this possible, though, as you know, resources were hard-pressed to accommodate the numbers attending.

Before I conclude, I must mention some of the problems and challenges we face as we look forward to our next quarter century. Most serious among these is our emerging space shortage—both in land and buildings. The three hundred acres set aside for our central campus in 1990 is almost fully utilized and we may have to turn away government and industrial research units who otherwise would build on university lands. We have proven that similar arrangements are mutually beneficial and it would be most unfortunate if shortages of land thwarted future opportunities. Our own classrooms, laboratories and residences are seriously overcrowded and in need of expansion, assuming that land space is available. There are other needs, of course, and I will shortly be announcing a major fund-raising campaign. We look for continued and increased community support and cooperation.

We are justified, today, in feeling a sense of pride for our past achievements. But the future will bring fresh challenges and new opportunities. It is interesting to imagine what one of my successors will say to a similar gathering at our fiftieth anniversary celebrations.

Thank you,

President

APPENDIX A

Terms of Reference and Membership

The IPG is to submit to the Minister of Advanced Education and Job Training by December 31, 1989, a detailed plan for the creation of a self-governing, degree-granting institution structured specifically to meet the needs of northern British Columbia. It should also plan to attract students from outside the north.

The plan must address relationships and methods of collaboration with the College of New Caledonia, Northern Lights College, and Northwest Community College, and the Open Learning Agency. It should also address relationships with other colleges serving residents of small communities, as well as with the three major provincial universities. The institution must be designed so as to enhance existing opportunities in northern British Columbia and to strengthen the system as a whole.

In the analysis and deliberation leading to the formulation of a recommendation, the IPG shall consider alternative models for the institution, and shall report upon the anticipated benefits, costs and risks of each. It shall then select a preferred model and develop a proposed plan for implementation over a plannable time frame.

In addition to the basic programming and administrative issues, the analysis and recommendations should address specifically: practical methods of responding to the unique needs of each major region within the north; the potential for research and/or graduate schools in disciplines of special relevance in the north; and the potential for social, cultural, and economic benefits from each alternative model considered, with particular reference to the model selected.

Within the available resources and time lines, the IPG may study relevant literature, review the development of post-secondary education in the Province, consider practice elsewhere, analyze the needs and opportunities in northern British Columbia, consult with other experts, and shall present a report containing their analysis and recommendations to the Minister of Advanced Education and Job Training by December 31, 1989.

It is expected that the committee will select consultants, direct them to outline a number of alternatives, assess the benefits, costs, advantages and disadvantages of each model, and on the basis of such assessment, select the model that meets both the terms and conditions outlined in this document and the criteria outlined in the attachment to this document and then direct the consultants to prepare a detailed plan based on the selected model.

The Government expressly recognizes that northern costs per weighted full time equivalent (WFTE) student will be higher than at existing provincial universities. The higher costs relate both to overhead costs (such as higher heating and faculty travel cost) and to a smaller scale (such as smaller class sizes). The Government is committed to spending up to 135%/WFTE Student in recognition of these higher overhead and scale costs, with that percentage premium dropping slowly as enrolment grow beyond 2,500 students. Start up costs, as outlined in the criteria attached to these terms of reference, would be in addition to this northern premium. Any funding received from the federal government, from other provincial government ministries and from private sources would also be in addition to the 135% budget factor.

The detailed plan must include, but not be limited to:

a) a criteria-based implementation schedule, which includes an identification of decision points, criteria to be met at each point (including enrolment, program range, learning resources such as a library and computing support, faculty, facilities, operating and research dollar levels, etc.) and an outline of the evaluation and data collection processes to be established to confirm that criteria are being met;

b) a detailed budget with the per WFTE student costs not exceeding the premium calculation outlined above;

c) a "start-up" cost budget in years 1, 2, and 3;

d) specific sources of supplementary grants for research development or special projects, including a consideration of the feasibility/desirability of grants, contracts or other arrangements from the British Columbia Ministry of Regional Development, the Federal Government and private sources to be identified;

e) a proposed mission statement for the degree granting institution;

f) recommendations regarding an effective model for institutional governance;

g) the name of the proposed degree granting institution; and

h) projected capital facilities costs for the implementation of the recommended model.

The plan should specify: the phased-in development of programs (both academic and professional) and supporting services; methods of delivery that will address regional needs while maintaining program quality and credibility;

specific areas or disciplines for research activity; criteria for faculty selection and recruitment which will ensure quality and credibility; anticipated location and facility needs for program delivery; the anticipated date for commencement of service of the self-governing, degree-granting institution and alternatives, if any, to address degree granting access for northern British Columbia during the interim period.

Attached is a list of the main criteria against which the report of the Task Force will be judged.

The final report of the IPG shall become a public document and the deliberations, working documents and records shall be held "in camera" during the proceedings. It is expected that the IPG will consult on a variety of matters and is free to prepare material for those consultations.

An adequate budget allocation for the IPG provides for all necessary expenses (reimbursed at provincial government rates, upon approval of the IPG Chairperson); for the employment of skilled and experienced professional consultants; and for honoraria for the chair and non-government members of the IPG.

The IPG shall operate under the direction of the appointed chairperson, who shall direct the Ministry of Advanced Education and Job Training in the administration of the IPG budget.

CRITERIA FOR ASSESSING TASK FORCE RECOMMENDATION

ACADEMIC QUALITY

- The overriding consideration must be academic quality;
- Program design, faculty selection and development, program evaluation and all other factors must recognize quality.

DEGREE CREDIBILITY

- In addition to academic quality, degrees granted by the degree-granting institution must be recognized broadly in the academic and business communities;
- If degrees are to be given by the institution in its own name, the planned institution must meet criteria which would normally be required for membership in the Association of Universities and Colleges of Canada (AUCC).

NORTHERN SYSTEM LINKAGES

- The new degree-granting institution must interrelate and interact with the programs of the existing northern colleges so that program choice or program quality are not reduced for northern students in the community college system.

- If the creation of the new degree-granting institution results in increased costs to existing institutions, such increased costs will be applied to the 135% budget factor for the new northern institution.

STEP BY STEP GROWTH—BUILDING ON STRENGTH

- A criteria-based implementation schedule is required which allows success in achieving staged goals, before proceeding to initiate the next steps in the plan.

- The proposal should recognize and build on the strong university transfer programs and the basic libraries, facilities and administrative support structures in the three northern community colleges.

- The potential for incremental development should be fully considered.

BUDGETARY CONSIDERATIONS

- Costs per weighted full time equivalent student (WFTE) must not exceed 135% of the costs of comparable programs at provincial universities when the number of full-time equivalent students (FTE) is less than 2,500.

- When the number of FTE's increases above 2,500, the northern premium declines gradually below the 135% figure mentioned above.

- Start-up costs, in the first three years of the institution and the first two years of any new programs will be permitted in addition to the above budgetary limits.

- In addition to the costs noted above, the institution is able to raise, budget and spend funds obtained form the private sector, other government ministries whose mandates and goals can be supported by the institution, federal departments as appropriate, and any other sources.

- Operating revenues will also include appropriate tuition fees.

NORTHERN DEVELOPMENT CONSIDERATION

- While educational objectives and criteria must be given priority, northern economic development objectives will also be pursued.

- Costs to support these secondary goals would normally be secured through the establishment of funding consortia of the kind noted above, or through special programs or arrangements with the Ministry of Regional Development.

- Linkage to federal, provincial or corporate research facilities must be developed.

NORTHERN SOCIAL AND MANPOWER NEEDS

- Programs should include, but not be limited to, the training of northern residents to meet northern manpower needs.

- Consideration should be given to professions such as teachers, social workers, business administrators, foresters and health care workers.

SUSTAINABILITY

- the degree granting institution must be designed for the long term, in terms of both budgetary and program considerations.

IMPLEMENTATION PLANNING GROUP MEMBERSHIP

Chairman:

Horst Sander, President
Northwood Pulp and Timber Limited
Prince George

Members:

Larry Bell
Chairman and CEO
B.C. Hydro
West Vancouver

Dr. John F. Ellis
Professor Emeritus
Simon Fraser University
North Vancouver

Dr. Leslie T.Foster
Assistant Deputy Minister
Ministry of Health
Victoria

Elsie Gerdes, Past President
Interior University Society
Prince George

Dr. Allan Gillmore
Executive Director Emeritus
Association of Universities and Colleges of Canada
Victoria

Louis Jewitt
Chartered Accountant
Prince George

Edward John
Interior University Society
Prince George

Joyce Krause
Registered Nurse
Terrace

Dennis Mitchell
Lawyer
Dawson Creek

Murray Sadler, Q.C., Past President
Interior University Society
Prince George

Thomas A. Steadman
Interior University Society
Prince George

Dr. Sheila Wynn
Assistant Deputy Minister
Ministry of Environment
Victoria

APPENDIX B

Mission Statement

The central purpose of the University of the North is to serve the citizens of Northern British Columbia. The University will play a leading role in the educational, cultural, social and economic life of the North. More specifically:

- The University will develop teaching, research and community service programs of high quality which place emphasis on the unique opportunities, issues and problems of northern British Columbia though not to the exclusion of provincial, national and international concerns.

- The University will offer, at least initially, two kinds of programs: general degrees in Arts and Science with concentrations in from ten to twelve disciplines; and carefully designed professional degrees in fields of particular relevance and need to northern British Columbia and the province.

- The University will offer degrees at the bachelor's, master's and doctoral levels.

- The University will encourage, support and reward the research activities of its professors and students. It will pursue collaborative research relationships with community agencies, government departments, private industry and other educational institutions.

- The University will encourage its members to share their knowledge and expertise with residents of northern British Columbia through a program of community service.

- The University will develop distinctive policies on student admission, continuance and graduation. Without sacrificing academic quality, it will remove, so far as is possible, arbitrary barriers to educational opportunity.

- The University will employ both conventional and innovative methods in order to make its programs accessible to those who previously have not had the opportunity of undertaking university studies. Included in this group are part-time students who have work or family commitments, native students, and students from less populous communities.

- The University will strive to attract and retain professors of the highest quality. It will develop policies and incentives which reward superior performance in teaching and research.

- The University will, within the bounds of fiscal viability, develop a clear identity of its own and will control its essential processes, equipment and facilities. At the same time, in view of its relatively small size and the geographic magnitude of its mandate, it must develop effective and harmonious working relationships with its fellow institutions in the region and province. In so doing the University will enhance existing opportunities and will avoid duplication of effort.

APPENDIX C

Enrolment Projections

Enrolment is as much a function of supply (programs offered) and marketing as they are a function of demographics. The following estimates have been developed on the basis of demographic data rather than projecting the demand for specific programs and, therefore, must be viewed cautiously. Sources used in the preparation of the projections included the Ministry of Advanced Education, the Report of the Fraser Valley Planning Committee, Population Projections from the Central Statistics Bureau, Census Canada and Ministry of Education Grade 12 enrolment projections.

Current British Columbia averages have been used for participation rates; however, it is important to note that the Access Initiative seeks to raise British Columbia averages to the Canadian average by 1994/95. Although the provincial trend towards rising participation has been reflected in these projections, it is possible that the Access Initiative will have a more positive impact upon the North than is projected in this model.

GRADE 12 DIRECT TO UNIVERSITY AND TO COLLEGE ACADEMIC

DATA

Grade 12 enrolment data, university eligibility data, transition rates to University and to College Academic Programs have been analyzed for Northern School Districts (Cariboo-Chilcotin, Quesnel, Prince Rupert, Bulkley Valley, Burns Lake, Nechako, Prince George, Peace River South, Peace River North, Kitimat, Terrace, Stikine, Nishga).

ASSUMPTIONS

1. Transition rates from Grade 12 to University range from 1.6% to 10.9% (1987 data) in Northern B.C. with the mean transition rate for the North being 6.1%. The University will have a positive impact on transition to University throughout the North, but the impact will vary in accordance with proximity to the central campus in Prince George. A conservative assumption is that the mean transition rate for the North will increase by 25% by 1999; a generous assumption is that the transition rate will increase by 75%.

2. Transition rates from Grade 12 to College Academic range from 1.9% to 15.1% in Northern B.C. with the mean transition rate for the North being 10.4%. The University will also have a positive impact on transition to College Academic, but the impact will be smaller. By 1999, the assumption is that transition from Grade 12 to College Academic will have increased by a minimum of 10% to a maximum of 30% for the North as a whole.

3. Initially, the University of the North will attract between 40% to 60% of those attending University, but its share will increase to between 50% to 70% by 1999.

4. 15% to 25% of College Academic students will go to the University of the North after first year and after second year at the College until 1994 when second year will be offered exclusively by the University. At this time the transition from first year to the University will rise to between 35% to 55% and there will be no further transition from second year.

5. Survival rates are based on SFU data, 25% attrition after year 1, 15% after year 2, 10% after year 3. SFU survival rates have been used for both high and low estimates and if these rates cannot be maintained by the new University then both high and low estimates will be too high.

6. Conversion to FTE is based on the average for this group being the SFU average of 0.8 FTE per student from high school.

Projections of First-time Headcount Enrolment Directly from Grade 12

		1988	1994	1999
Student Pool	Grade 12 Enrolments	3725	3200	3100
Direct to University Group				
Assumption 1 - Low	University Transition	6.10%	6.80%	7.60%
Assumption 1 - High	University Transition	6.10%	8.40%	10.70%
Low x student pool	To University	227	219	236
High x student pool	To University	227	267	331
Assumption 3 - Low	Attending U of North	91	98	118
Assumption 3 - High	Attending U of North	136	174	232
Direct to College Academic Group				
Assumption 2 - Low	College Transition	10.40%	10.90%	11.40%
Assumption 2 - High	College Transition	10.40%	12.00%	13.50%
Low x student pool	To College Academic	387	349	355
High x student pool	To College Academic	387	483	419
Assumption 4 - Low	Attending U of North	116	105	106
Assumption 4 - High	Attending U of North	194	191	210
Total from Grade 12 - Low		207	221	242
Total from Grade 12 - High		330	321	384

Forecast of Headcount Enrolments
Years 1 through 4

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Year 1 - Low	91	93	96	98	102	106	110	114	118
Year 1 - High	136	148	160	174	185	198	210	221	232
Year 2 - Low	0	124	128	194	196	199	202	205	210
Year 2 - High	0	198	207	330	341	353	365	380	396
Year 3 - Low	0	0	164	167	175	166	169	172	174
Year 3 - High	0	0	265	273	281	290	300	310	329
Year 4 - Low	0	0	0	147	150	158	150	152	154
Year 4 - High	0	0	0	239	246	253	261	270	279
Total - Low	91	217	388	606	623	629	631	643	656
Total - High	136	346	632	1016	1053	1094	1136	1181	1236

Note: Year 1 enrolments equal the direct to university group. Year 2 equals 75% of the direct to university group plus one-half of the direct to college group until 1994/95 when it is includes all the college group. Year 3 equals survival from year 2 (85%) plus the remaining half of the direct to college group until 1994/95.
Year 4 equals the survival from year 3 (90%).
Estimated 1999 transition rates of 13 - 18% compare favourably with the market research (Appendix I) which suggests that 16% be used as a liberal (i.e. generous) estimate for planning purposes.

Conversion of Headcounts to FTEs
(80% of Headcount Enrolments)

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Total - Low	73	174	310	485	498	503	504	514	525
Total - High	109	277	506	813	843	875	909	945	984

MATURE STUDENTS

ASSUMPTION

1. FTE participation by mature students will reach between 40 and 70% of the Vancouver participation rate in the College of New Caledonia region and 20 to 30% in the Northwest and Northern Lights College regions by 1999. Pent-up demand from Northerners reflected in the market research will increase enrolments in early years but will not be a factor by 1999.

College Region	Age Group	Vancouver Rate	Low Rate	High Rate	Population	Low FTE's	High FTE's
New Caledonia	25 to 34	1.866	0.7464	1.3995	29829	223	418
	over 35	0.218	0.0872	0.1635	66313	58	108
Northwest	25 to 34	1.866	0.3732	0.5598	15894	59	89
	over 35	0.218	0.0436	0.0654	36684	16	24
Northern Lights	25 to 34	1.866	0.3732	0.5598	10892	41	61
	over 35	0.218	0.0436	0.0654	29812	13	19
Total					189424	410	719

Forecast of Mature Student FTE Enrolments

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Low	41	102	164	205	246	287	328	368	410
High	72	180	288	360	432	504	575	647	719

GRADUATE STUDENTS

ASSUMPTION

1. Graduate enrolments will depend largely on the quality of the programs and it takes longer to develop quality graduate programs. Therefore, the assumption is that graduate enrolments will equal 5 to 10% of the undergraduate enrolment base from high school, mature students and students from outside the North by 1999.

Forecast of Graduate Student FTE Enrolment

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Low - 5%	0	0	0	4	12	24	34	43	53
High - 10%	0	0	0	13	44	87	125	156	199

STUDENTS FROM OUTSIDE THE NORTH

ASSUMPTION

1. The University will attract an additional 5 to 15% over the above undergraduate base from outside the North.

Forecast of Outside Student FTE Enrolment

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Low	7	16	28	41	43	48	48	51	53
High	31	79	138	206	223	240	257	274	291

DISTANCE EDUCATION STUDENTS

ASSUMPPTION

1. The University will attract from 5 to 15% of the existing university level distance education enrolments of students living in the North by 1999. (Current enrolment from the North is 4,000 registrations or about 400 FTEs.)

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Low	0	0	0	7	8	10	13	16	20
High	0	0	0	20	25	31	38	48	60

TOTAL FTE ENROLMENT

	1991	1992	1993	1994	1995	1996	1997	1998	1999
Low	121	292	502	742	807	872	927	992	1061
High	212	536	932	1412	1567	1737	1904	2070	2253

ASSUMPTION

1. Enrolments for this profile are set above the low range and below the high range detailed in preceding sections.

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00
B.A. - year 1 + 2	0	50	120	170	190	210	230	250	270	280
B.A. - year 3 + 4	0	0	40	100	150	162	179	196	213	220
B.Sc. - year 1 + 2	0	50	100	140	150	160	170	180	190	195
B.Sc. - year 3 + 4	0	0	30	85	120	128	136	145	152	155
B.B.A. - year 3 + 4	0	0	0	30	60	90	100	110	120	130
M.B.A.	0	0	0	0	5	10	20	20	20	20
Education - PDP	0	40	60	70	70	70	70	70	70	70
Education - B.Ed	0	0	30	60	90	110	130	140	150	160
Education - M.Ed	0	0	0	5	5	10	15	15	20	20
Res. Mgt - year 3 + 4	0	0	0	30	60	90	100	110	120	125
Res. Mgt - M.Sc.	0	0	0	0	5	5	10	15	15	15
B.Sc. Comp. - year 3 + 4	0	0	0	30	60	90	100	110	120	125
M.Sc. Comp	0	0	0	0	5	5	10	15	15	15
B. Nurs. - year 3 + 4	0	0	0	30	60	90	100	110	120	125
Other Schools*										
School A	0	0	0	0	0	20	40	60	60	60
School B	0	0	0	0	0	0	0	20	40	60
School C	0	0	0	0	0	0	0	0	0	20
Ph.D.'s	0	0	0	0	0	0	0	5	5	5
Total	**0**	**140**	**380**	**750**	**1030**	**1250**	**1410**	**1571**	**1700**	**1800**

One FTE equals 15 units or 30 semester hours

* Possible additional professional or applied schools may include: Optometry, Health Management, Rehabilitation Medicine, Social Work, Fine and Performing Arts, Northern Development, Transportation, Forestry, Environmental Studies, Criminology.

APPENDIX D

Financial Information

The proposed new university requires a Prince George campus with comprehensive facilities for 2,000 students, and a master plan with land reserves to accommodate 6,000. Regional university centres will be developed concurrently. Although detailed capital, start-up and operating budgets have not been determined, order of magnitude estimates have been made with reference to institutional construction costs, revenue and expenditures for small (<2,000 FTEs) universities, generic start-up costs and arbitrary amounts for the extra costs of regional delivery. A substantial investment is involved and a solid commitment for development costs ahead of enrolment revenues is required throughout most of the university's first decade.

Financial information in this section includes:

- University of the North Breakeven Simulation
- Revenue for University of The North Based on Program Profile
- University of The North Operating Expenditures
- Financial Summary

UNIVERSITY OF THE NORTH BREAKEVEN SIMULATION

(Note: Breakeven simulation is not based on the enrolment projections and program profile provided in Appendix C.)

ASSUMPTIONS

1. 65 Faculty in tightly focussed programs.

2. Program profile with 861 FTE students in third and fourth year undergraduate programs and 37 FTE students in graduate studies.

3. Revenue generated by this program profile is $10,300,000 in 1994/95.

4. Humanities, Social Sciences, Natural Sciences and Aboriginal Studies are divisions within the Faculty of Arts and Science.

	Year 1	Year 2	Year 3	Year 4	Year 5
Administrative/General					
President's Office	$260,000	$260,000	$260,000	$260,000	$260,000
Academic V.P.	$140,000	$240,000	$260,000	$260,000	$260,000
Administration	$300,000	$700,000	$930,000	$1,080,000	$1,080,000
Library	$300,000	$700,000	$750,000	$800,000	$800,000
Student Services	$200,000	$300,000	$400,000	$600,000	$600,000
Plant	$300,000	$400,000	$600,000	$1,000,000	$1,000,000
Subtotal	$1,500,000	$2,600,000	$3,200,000	$4,000,000	$4,000,000
Academic					
Humanities	$200,000	$372,057	$558,086	$682,105	$806,124
Social Sciences	$200,000	$431,706	$647,559	$791,461	$935,363
Natural Sciences	$200,000	$581,873	$848,315	$1,019,844	$1,189,453
Aboriginal Studies	$0	$128,395	$192,593	$235,392	$278,190
Education	$200,000	$273,575	$410,362	$501,553	$592,745
Business	$200,000	$312,394	$468,588	$572,720	$676,851
Forestry/Res. Mgmt.	$0	$200,000	$374,497	$457,718	$540,940
Computer Science	$0	$0	$200,000	$539,207	$637,244
Nursing	$0	$0	$200,000	$400,000	$443,090
Other Programs	$0	$0	$0	$0	$200,000
Subtotal	$1,000,000	$2,300,000	$3,900,000	$5,200,000	$6,300,000
Total Expenditures	$2,500,000	$4,900,000	$7,100,000	$9,200,000	$10,300,000
Student Revenue	$0	$1,500,000	$4,300,000	$7,340,000	$10,300,000
Deficiency	$2,500,000	$3,400,000	$2,800,000	$1,860,000	$0
# of Faculty (FTE)	10	30	45	55	65
# of Students (FTE)	0	140	400	640	898
Student Faculty Ratio	0	5	9	12	14

REVENUE FOR UNIVERSITY OF THE NORTH BASED ON PROGRAM PROFILE

ASSUMPTIONS

1. Funds are in 1989/90 Constant Dollars (millions).

2. Provincial FTE grant equals FTE x Program Weight x Northern Premium (35%) x Unit Value (Provincial grant per WFTE).

3. Tuition Revenues are based on $1,600 per undergraduate and $2,000 per graduate student (full-time).

	90/91	91/92	92/93	93/94	94/95	95/96	96/97	97/98	98/99	99/00
FTE's	0	140	380	750	1030	1250	1410	1570	1700	1800
Provincial FTE Grant	0.00	1.30	3.60	7.20	9.80	11.90	13.50	15.00	16.20	17.20
Institution Start-up Funds	2.50	3.50	3.30	1.70	0.00	0.00	0.00	0.00	0.00	0.00
New Program Start-up	0.00	0.00	0.00	0.00	0.00	0.20	0.20	0.20	0.20	0.20
Tuition Revenue	0.00	0.20	0.60	1.20	1.60	1.90	2.20	2.40	2.60	2.80
Total Revenue	2.50	5.00	7.50	10.10	11.40	14.00	15.90	17.60	19.00	20.20

UNIVERSITY OF THE NORTH OPERATING EXPENDITURES

ASSUMPTIONS

1. Academic expenditures are based on B.C. averages per specific program. Where necessary a minimum required expenditure has been used for small programs. The average faculty salary used is $58,434.

2. Other costs include faculty research, faculty travel, postage, telephone equipment rentals, employee benefits. Total expenditures per faculty FTE are $161,335.

3. Administration, plant, library and student service funds based on expenditures at other small universities in Canada and reflect the higher need for regional delivery at the University.

4. Model based on the program profile with 1,800 FTEs.

5. The smaller enrolments at the University will lead to a student/faculty ratio which, at 14:1, is lower than that of other B.C. universities. The same number of faculty could serve larger enrolments.

6. A lower proportion of expenditures on Instruction/Research result from the University's small size and tightly focussed programs.

7. Excluded, for the purposes of this simulation, are funds from endowed chairs, contract research, federal government and any provincial grants for special teaching and development projects. Ancillary operations are also excluded, as they are largely self-funding.

	1990/91 $	1991/92 $	1992/93 $	1993/94 $	1994/95 $	1995/96 $	1996/97 $	1997/98 $	1998/99 $	1999/2000 $
Administrative/General										
President's Office	260,000	260,000	260,000	260,000	260,000	260,000	260,000	260,000	260,000	260,000
Academic V.P.	140,000	240,000	260,000	260,000	260,000	260,000	260,000	260,000	260,000	260,000
Administration	300,000	700,000	930,000	1,380,000	1,480,000	1,880,000	2,080,000	2,480,000	2,780,000	2,880,000
Library	300,000	700,000	750,000	900,000	900,000	1,200,000	1,300,000	1,450,000	1,600,000	1,600,000
Student Services	200,000	300,000	400,000	600,000	600,000	900,000	1,000,000	1,100,000	1,200,000	1,300,000
Plant	300,000	400,000	600,000	1,000,000	1,000,000	1,400,000	1,600,000	1,800,000	2,000,000	2,200,000
Subtotal:	1,500,000	2,600,000	3,200,000	4,400,000	4,500,000	5,900,000	6,500,000	7,350,000	8,100,000	8,500,000
Academic										
Humanities	200,000	403,062	671,770	808,124	967,349	1,142,009	1,303,234	1,410,717	1,477,894	1,558,507
Social Sciences	200,000	487,682	779,470	935,363	1,122,488	1,325,098	1,512,171	1,636,886	1,714,833	1,808,369
Natural Sciences	200,000	600,258	998,257	1,189,453	1,427,294	1,685,059	1,922,949	2,081,543	2,194,554	2,305,165
Aboriginal Studies	0	200,000	193,188	231,825	278,190	328,419	374,784	405,694	425,013	448,195
Education	200,000	246,977	411,627	493,954	592,745	699,749	798,559	864,420	905,583	954,978
Business	200,000	282,021	470,035	564,043	676,851	799,080	911,868	987,074	1,034,077	1,090,482
Forestry/Res. Mgmt	0	200,000	375,653	450,783	540,940	638,609	728,766	788,870	826,436	871,514
Computer Science	0	0	200,000	528,455	637,244	752,302	858,510	929,315	973,568	1,026,671
Nursing	0	0	200,000	400,000	456,901	539,397	615,547	666,314	698,042	736,119
Other Programs	0	0	0	0	200,000	290,278	323,612	479,187	750,000	1,000,000
Subtotal:	1,000,000	2,400,000	4,300,000	5,600,000	6,900,000	8,200,000	9,350,000	10,250,000	11,000,000	11,800,000
Total Expenditures	2,500,000	5,000,000	7,500,000	10,000,000	11,400,000	14,100,000	15,850,000	17,600,000	19,100,000	20,300,000
# of Faculty (FTE)	10	30	50	60	72	87	99	110	119	126
# of Students (FTE)	0	140	380	750	1,030	1,250	1,410	1,570	1,700	1,800
Student/Faculty Ratio	0	5	8	13	14	14	14	14	14	14

GENERAL OPERATING EXPENDITURES BY FUNCTION (North based on 1999/2000)
- Percentages for Reference purposes only

	U.B.C.	S.F.U.	U.Vic.	NORTH	Brandon	Lethbridge
Instruction/Research	69.2	64.2	65.9	58.1	58.1	61.7
Library	7.4	6.9	8.6	7.9	7.1	6.1
Admin/General	8.6	12.7	10.8	16.8	14.4	17.3
Plant	11.3	9.2	10.4	10.8	15.6	10.7
Student Services	3.5	7.0	4.3	6.4	4.8	4.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

Financial Summary 1990-2002
1989 Dollars ($000s)

Year	Student FTE	Faculty	Total Operating Expenditures	Start-up and Development Requirements	Facilities Costs†
1990/91	0	10	2,500	2,500	4,800
1991/92	140	30	5,000	3,500	4,400
1992/93	380	50	7,500	3,300	28,800
1993/94	750	60	10,000	1,700	47,600
1994/95	1,030	72	11,400	0	34,100
1995/96	1,250	87	14,100	200	3,900
1996/97	1,410	99	15,850	200	8,900
1997/98	1,570	110	17,600	200	500
1998/99	1,700	119	19,100	200	2,200
1999/00	1,800	126	20,300	200	26,700
2000/01	1,900	136	21,500	200	6,700
2001/02	2,000	143	22,500	200	400
Total			167,350	12,400	169,000

† Details included in Appendix E (excludes land). The estimate is based on conventional institutional development of a green field site. A "fast track" design and construction approach is likely to accelerate the timing of capital expenditures.

APPENDIX E

FACILITIES

Development Cost Estimate (Note 1)
(1989 Dollars)

Component	Estimated Cost ($000)	
Board and Administration	$ 1,700	
Central Services	1,600	
Instructional Facilities	66,600	
Academic Services	11,100	
Physical Plant	3,700	
Special Concourse	3,000	
Furnishing and Equipment	12,200	99,900
Land (Note 2)	-	
Site Development	3,000	
Surface Parking	6,600	9,600
Ancillary and Association Facilities	11,300	
Recreation/Athletics Facilities	5,700	
Residences	30,000	47,000
Temporary Facilities	2,500	
Regional Facilities	10,000	12,500
Total Project Cost (Note 2)		$169,000

Note 1

The IPG commissioned a preliminary estimate of facility program requirements and capital costs for developing the recommended University. The capital cost estimate is based on a facility program for 2,000 student FTEs at the main campus. A first phase of 1,500 FTE was also estimated, at a cost reduction of $37.8 million. The estimates were prepared using prevailing university standards and should be viewed in aggregate. The costs include professional

fees, planning and administration, development cost charges and a 5% contingency. No interest or escalation reserves are included. Details are included in the November, 1989 report of Cornerstone Planning Group Limited.

Note 2

Land costs have not been estimated. Offers of assistance to identify and obtain appropriate sites have been received from the following:

City of Prince George
District of Kitimat
District of Mackenzie
Village of Fort St. James
City of Quesnel
District of Tumbler Ridge
City of Dawson Creek
Village of McBride
City of Fort St. John
City of Terrace

The three northern colleges, Northwest Community College, Northern Lights College and the College of New Caledonia have indicated a general willingness to share facilities and resources where appropriate. The City of Prince George has also offered to co-operate with multi-purpose track and field facilities, performing arts center and swimming pool.

APPENDIX F

ALTERNATIVE MODELS CONSIDERED

TASK FACING THE IMPLEMENTATION PLANNING GROUP

When the IPG began its deliberations in the Spring of 1989, it was presented in its terms of reference with a rather formidable array of specifications laid down by the Ministry of Advanced Education and Job Training - specifications which defined the criteria against which its "detailed plan for the creation of a self-governing, degree-granting institution" in northern British Columbia would be assessed.

Among these specifications were the following:

- that the institution must be structured specifically to meet the needs of northern British Columbia;
- that its nature, however, should also be such as to attract students from outside the north;
- that the IPG's plan must address relationships and methods of collaboration with existing community colleges and the Open Learning Agency (OLA), as well as with the three major provincial universities; and,
- that in general the institution must be so designed as to enhance existing educational opportunities in northern British Columbia and to strengthen the system as a whole.

Moreover, in formulating its final recommendation, the IPG was required to show that it had considered "alternative models for the institution", and to report upon "the anticipated benefits, costs, and risks of each". In particular, it was asked in this connection to assess the potential for research and graduate work in disciplines of special relevance to the north, as well as to comment upon the potential for social, cultural and economic benefits engendered by each of the alternative models.

It became immediately obvious that to satisfy these criteria, and also to take due account in its work of the hopes and aspirations of northern citizens and of their communities, the group faced an immensely complicated set of tasks. For

instance, how many distinct degree programs should be made available within the new institution? Should it content itself only with offering a general B.A. and B.Sc.? Or should there also be degrees available in Nursing, in the field of Business Management, in Teacher Training, in Physiotherapy, in Forestry, and so forth? But how many such programs could be offered, and in what combinations? There was no shortage of possibilities at this point. Again, at what levels should educational activity be conducted? Should it be only at the undergraduate level? Or should there be programs at the master's level and even at the doctoral as well? How many campuses should there be, in addition to a central facility at Prince George? How could the proposed institution have an effective regional presence? What relationships should it have to other educational institutions in the region? Above all, should it be essentially a college, or fundamentally a university?

Given the huge number of permutations and combinations in play, the IPG found itself facing a dismaying welter of possible "models", with each variant having its advocates and its supporting arguments. Under this set of circumstances, it became plain to the planning group that it could not possibly discharge the responsibilities stipulated under its terms of reference without first devising some appropriate strategy for the conduct of its inquiries and its debates.

STRATEGY FOR MODEL ASSESSMENT

In order to simplify its task and to make the job manageable, the IPG decided to adopt what might for convenience be termed a **modular strategy**. The first element in this strategy was to distinguish in our minds between the core functions of the proposed institution—those which would be at the centre of its mandate and would constitute its very foundation—and those which might be thought of as additional "modules" or "upper storeys" resting upon that foundation. We therefore took as our first-order question: In what fundamental tasks should our new institution engage? We decided that only when we had become clear about the answer to that question, could we go on to deal with such important but nonetheless "second order" issues as, for example, the scheme of governance under which it might operate, its division of labour with other institutions already existing in the north, its relations with OLA and the coastal universities, and so forth.

As a second and related part of the strategy, it was agreed that each of our core models would be subjected to a series of "acid tests" or "survival tests". The logic here was that if a proposed model failed one or more of these tests, so that its very foundation was deemed inadequate, then there would be no point in proceeding to discuss such further aspects of its structure and operations as its mode of governance, its liaison with other institutions, its operating budgets, or indeed any other feature whatever. On the other hand, if several models were to survive these acid tests, it was agreed that we would

then have to proceed to discriminate amongst the survivors on the basis of how well they had met the survival tests, and how well they could meet such further and second-order assessments as might be relevant.

THREE SURVIVAL TESTS

Taking into account the specifications laid down in our terms of reference, and our own sense of the challenges implicit in the creation of a new institution designed to satisfy the demands and high expectations awaiting it, we agreed on the following three "survival tests".

- As a **first priority** the institution should be so designed and structured as to assure its **academic excellence**. In particular, its degrees must from the outset have high academic credibility and solid "market value". Otherwise, "accessibility" loses much of its meaning; accessibility to a degree of little value is an empty right of access indeed.

- In **second place**, we put the criterion of **"sustainability"**. To the IPG, this test entailed first of all **fiscal viability**, in the sense that the institution should be capable, within a reasonable period, of meeting the funding constraints set forth in our terms of reference. Inasmuch as funding over the long run is to be essentially enrolment driven, it was plain that "fiscal viability" is almost entirely a function of the enrolment which the institution could expect to attain. However, "sustainability" also included the condition that in due course the acceptance of the institution not only at the regional but also at the provincial level should be such that it would strike deep roots and would enter upon a period of sustained long term growth in enrolment and in expansion of its activities.

- The **third test** was that of **institutional autonomy**. The group was unanimous in holding that without a measure of autonomy quite as large as now permitted to existing provincial universities, our new northern institution could not possibly achieve the objectives spelled out so clearly in our terms of reference by Government itself. Lacking such autonomy, the new institution might indeed serve some useful function or functions, but it would fall far short of meeting the legitimate expectations of our northern communities. In particular, it could not achieve a truly northern orientation or identity: it would be an institution "in" the north, but not "for" the north.

COLLEGE OR UNIVERSITY?

With the above strategy in place, the IPG then addressed the most basic issue at stake in assessing any model, namely, should the new institution be a degree granting **college**, or a true **university**?

In discussing the option of a "college", we were naturally not using the term in the sense in which it currently applies to "community colleges" in western Canada. Nor, of course, were we thinking of a "college" in the still different sense of a constituent part of a larger university, or an institution affiliated with such a university. All such possibilities are clearly excluded by our terms of reference. Rather, we had in mind an independent entity resembling some of the private institutions now operating in British Columbia and Alberta, or in the United States, in that it would offer a four-year curriculum comprising a variety of basic disciplines, and would grant perhaps two or more general degrees to students successfully completing its degree requirements. The distinction between such a college and a university, in the minds of the IPG, essentially has to do with whether the faculty of a given institution actively engage in scholarship and in research, whether pure or applied. Both colleges and universities are committed to the dissemination of knowledge and service to their communities, but the characteristic mark of the university is that in addition to those two functions the practice of scholarship and research is expected of all faculty, not as an optional but as a core element in their obligations. Advancement in rank and participation in other rewards within a contemporary university will depend in large measure upon how well faculty discharge that obligation. Furthermore, with very few exceptions indeed, the successful prosecution of research requires the existence of a faculty of graduate studies, extending generally beyond the master's level to that of the doctorate.

With such working definitions of "college" and "university" in place, the IPG was now ready to sort out possible "alternative models" into two basic "tracks". Along "Track A" would lie options developing the college model; along "Track B" would be various forms of a university.

POSSIBLE COLLEGE MODELS

On this first track, our attention focussed essentially on two possibilities. Under Model A-1 we envisaged a new institution, fully autonomous in nature, and engaged in instruction in a variety of basic disciplines. It might initially offer good quality general B.A. and B.Sc. degrees, with perhaps other educational streams to be added as circumstances warranted. One immediate problem we had to face was the relationship between the educational mandate of this college (we called it "New North" for the sake of clarity of discussion) and that of the College of New Caledonia (CNC). Our working hypothesis at this

point was that CNC would be left undisturbed in the discharge of its university transfer work at Years 1 and 2. Teaching in New North would thus be confined to the two upper years. As a college, research activity would not be part of its core mandate.

Such an autonomous college might well discharge a useful mission in providing further levels of higher education to some segment of the population in Prince George and elsewhere in the north. However, its financial viability came into immediate question. It would have little if any power to attract students from outside the north as required by the terms of reference. Given also the division of enrolment between this institution and CNC, the level of financial operating support for "New North" became most problematic.

Another serious objection had to do with the absence of research. The members of the IPG hold that the academic quality of a northern institution depends fundamentally on the existence of research as part of its very mandate. As already noted, such excellence was our first priority. Moreover, it was felt that an institution without a research mandate could not really have a distinctively northern identity. If it is to have such an identity, it must be actively prosecuting lines of research of relevance and importance to the north. An institution confined essentially to "teaching" cannot keep pace with new discoveries and insights in academic disciplines, whether pure or applied; in consequence, it would always be a laggard in its capacity to address pressing northern needs and northern concerns. In short, the proposal to establish a new and autonomous college in the north failed two of our critical "survival tests"—those of viability and of excellence.

A second possibility along this first track brought us to a consideration of implanting in the north with CNC as a base the "university-college partnership" model now being implemented in such centres as Kamloops, Kelowna and Nanaimo. Such a development was advocated by the faculty association of CNC, and indeed presented certain advantages not found in other models. For instance, it might be the quickest way in which to expand educational opportunities in the North. Moreover, under this approach students could obtain degrees from one of the coastal universities, with the result that their credentials would have instant and high academic credibility. Some incidental research activity might be possible for at least some qualified members of staff; but research would not be part of the core mandate of the college and would not be expected of all faculty.

However, it is very clear that under the "partnership" model a northern college would **not** have anything like the degree of autonomy characteristic of our three existing provincial universities. In this arrangement, a large measure of control over faculty appointments and over curricula must necessarily reside and continue to reside with the coastal universities. Under such circumstances, the IPG considered that northern needs could not be addressed with the vigor and urgency that we see as necessary. The "partnership" model may suit other

communities well enough, but it is not acceptable to the north. Indeed, since by definition this model postulates a condition under which key decisions are not and cannot be wholly in the hands of the proposed northern institution, that institution could not really be the "self-governing" structure of which we are assured in our terms of reference. For all practical purposes, it is ruled out of court by the terms of reference themselves.

POSSIBLE UNIVERSITY MODELS

Along a second track lie models which incorporate the essential features of a university. The committee spent a considerable amount of time discussing the merits and demerits of Model B-1, which presented a hypothetical institution conforming quite closely at its core to that of many other small Canadian universities, including, for example, such regional institutions as Brandon and Lethbridge. At the centre or foundation of all such universities lies a faculty of Arts and Science, typically comprising fifteen or more basic disciplines, covering the humanities, the social sciences, mathematics, and the natural sciences. Other schools or faculties, such as Education, Business, or Nursing can exist as additional floors or "storeys" built upon that base. Being very conscious of the constraints on funding inherent in the governmental guidelines, we examined the feasibility of operating with a rather small core faculty of some 115 full time persons, but capable of offering quality undergraduate degrees in Arts and Science and of engaging in research and in some graduate work at the master's level. Such an autonomous institution would of course be free to direct its energies along lines of study and research pertinent to local or regional needs and interests. Examples were given from other small Canadian universities to demonstrate the validity of that point. Altogether, the IPG felt that such a "conventional university", organized and functioning along rather standard lines, presented some highly desirable features.

However, in our judgment this conventional model for a northern university could not survive the critical viability test. Its power to attract students from outside the north was in considerable doubt, especially in view of the enlargement of educational opportunities now proceeding in southern regions. Moreover, if CNC were to be left with all of or the bulk of its work in university transfer programs at first and second year levels, the enrolment levels of our hypothetical institution might not be sufficient to cover basic operating costs. If that were the case, the Arts and Science foundation would be too weak to support the existence of professional schools in such fields as those mentioned above. At this point a variant model was proposed, which cut the faculty numbers in B-1 almost in half, and which sought to remedy the resulting losses in curricular choice by utilization of a full panoply of distance education courses available through the medium of the Open Learning Agency. However, it became clear that such a hybrid operation would have its own weaknesses and in particular would make a meaningful degree of research impossible. In other words, the hybrid would really be only a northern college not a university.

We then turned to an examination of a second major model lying along the "B-line" track. This model presented us with a quite different set of options. Although the name is perhaps not entirely apt, we can refer to it as the proposal for a "northern technical university". One important feature of this proposal was that this "technical university" would take students prepared by other institutions, either colleges or universities, into the upper levels of undergraduate work. For instance, students who had completed two years of work in computing science at a college or technical institute might enter upon a specially adapted third and fourth year program leading to an undergraduate degree in that field. Other possible curricula, for example, could be developed in business education, or in nursing, in teacher training, or resource management. The university would offer programs with defined and limited curricular "menus", which would be addressed to northern concerns and needs. Intake of students would be by selected cohorts—a feature which would make enrolment planning less hazardous than in other models presented to the IPG. Some of the proposed programs, it was agreed, might well attract students from outside the north. From the outset, the technical university would engage in graduate work at both the master's and the doctoral levels. Such a policy, it was suggested, would very quickly put the new institution on the academic map and moreover secure for it on that map a most credible location. Admittedly, the scope of such a university would be narrower than that of the more conventional model. But the sacrifice in scope would be compensated for by a corresponding gain in northern focus and identity.

In spite of its attractions, the IPG was of the view that this second model could really not function satisfactorily on a "stand alone" basis. It was considered that programs of an inter-disciplinary nature, while certainly pertinent to northern concerns, relied at critical points upon the course offerings, research contributions, and special facilities of conventionally organized university departments. Moreover, it was felt that there would be an appreciable demand in the north for programs of a conventional type in arts and science disciplines not only by the traditional "college age" students but by large numbers of mature students as well.

THE COMPOSITE MODEL

Our fifth and final model, which emerged from a prolonged and thorough discussion and review of all contending possibilities, sought to create a synthesis of the best features of Model B-1 and B-2—in other words, to incorporate as far as we could the attractive features of both a relatively small scale "conventional university" and the novel approach of a northern technical university. Neither, we considered, was viable in isolation from the other, yet each complements the other at points where the other was deficient.

From that vantage point, we went on to consider the important second-order questions which remained to be addressed. For instance, we turned to discussions of the relationships which should exist between our composite model and other educational institutions in the north; to an examination of what governance structures should be adopted for this new university; to issues relating to the special concerns of native people; to matters of distance education, and to the other questions that are dealt with in the main text of this report.

As Appendix C makes clear, we believe that there is a strong likelihood that this composite model can survive the acid test of financial viability and long-run sustainability. It meets the test of autonomy; and with strong and continuing support not only from Government but also from northern communities, it should be able as well to meet the challenge of excellence and to deal with urgent northern concerns and priorities, in education, research and service.

There is a reliable maxim governing most human affairs to the effect that risk and reward always go together. If that is true, then this model, promising as it does some high rewards, admittedly cannot be said to be utterly risk-free. Because we are dealing with a quite novel situation, the enrolment projections we have advanced must remain to some degree problematic, especially in respect of the dates at which we project certain levels of enrolment will be attained. Over the long term, however, it really does not matter much whether such and such an enrolment figure will be reached in precisely such and such a given year. What we must count on is the very high probability, amounting indeed to a moral certainty, that with determined and unremitting support from all quarters, our proposed new university will not only reach but surpass our current expectations for its future.

APPENDIX G

Economic Benefits

Increasingly international trade is drawing industrial nations together, creating an interlocking global economy that goes beyond national boundaries. In this new economic world, current information and technology are crucial. So too is access to large markets. The process now underway in Western Europe, enhanced by the recent developments in East Germany and other eastern block countries, will create by 1992, a single continental market considerably more integrated than the one being created in North America by the Free Trade Agreement. Another large, regional economic block, centered on Japan, is now taking shape in Southeast Asia. Canada is now faced with the need to adapt to an emerging world in which technological innovation and an increasingly well-trained and well-educated work force are the keys to survival and success.

The Implementation Planning Group recognizes this environment and suggests certain economic benefits from the establishment of a new university. These benefits are described in general terms without detailed study and are not intended to represent definitive benefits nor do they reflect any cost-benefit analysis.

ROLE OF UNIVERSITIES

Universities make major contributions to the provincial and federal economies through their various programs of education thereby enhancing the quality of human capital resources that are essential to meaningful economic and social development.

Growth in the economy and in employment are closely related to the level of education of the workforce. Advanced education will be critical to any aspiration of success in the international marketplace. The quality of education, particularly advanced education, is now and will be a major determinant of the degree of economic success and a key to developing the type of economic infrastructure required to create wealth, namely new, export oriented business enterprises.

The strategy for economic growth adopted by the majority of provincial jurisdictions coincides with the plan adopted by the Province of British Columbia. The fundamental factors of the plan include:

- Investment (in skill and industry development)
- Trade (multinational and export orientation)

- Human resources (education and training)
- Technology (development, innovation and transfer)

IMPACT OF UNIVERSITIES IN B.C.

In British Columbia the research activities of the universities have a major impact on the provincial economy. They generate more than 60% of the research in the province. By virtue of their basic and applied research, the universities are the province's major connections to the knowledge networks of the world, and the prime sources of highly specialized advice and facilities. They provide a forum for thoughtful consideration of the impact of a fast-changing society on cultural and ethical values. Their discoveries and inventions are the inspiration for new business enterprises. They excel in the import and export of technology, know-how and insight for economic benefit. Their resources of talent and facilities are magnets for investment by industry. They are major actors in the processes of technology transfer.

In addition to the qualitative impact of universities, universities also have a quantitative impact on the provincial economy. Research grants and contracts bring more than $100 million into the province each year. Out-of-province students contribute at least $20 million. Visitors from all parts of the world come to the universities for scholarly conferences and make significant contributions to revenue from tourism. From these and other sources, universities are directly responsible for an injection of at least $150 million annually into the British Columbia economy from out-of-province sources.

A UNIVERSITY IN NORTHERN BRITISH COLUMBIA

The economic activity which will be generated as a result of the establishment of a University in Northern British Columbia is expected to be substantial.

Immediate benefits which may be generated and realized would be in those industries directly related to the construction of facilities. Northern based developers, contractors, suppliers and tradespeople would have a direct opportunity to participate in the development of the campus in Prince George and subsequently in the development of other facilities in other northern jurisdictions.

Long term economic benefits for northern regions would be dependent upon the university's procurement of goods and services from northern suppliers, enhanced employment opportunities and, enhanced population growth and purchasing power of northern residents.

TANGIBLE BENEFITS

The establishment of a university in Northern British Columbia precipitates the development of a central campus structure in Prince George and regional University centres. The total investment in university facility development is estimated to be approximately $169 million over 12 years. According to statistics Canada and the British Columbia Ministry of Finance, an investment of $169 million in university accommodation will create approximately 3,000 person-years of employment in the construction and related industries. Direct university employment by year 10 is expected to reach 250 - 300 professional, technical, administrative and support personnel. An increase in Gross Domestic Product of approximately $150 million is expected as a result of the construction related expenditures.

As a result of establishing a university in Northern British Columbia, the demand for university oriented goods and services will be created. The extent of this demand will in part determine the corresponding degree of private sector service industry development in the North. The estimated expenditure on university oriented goods and services, including payrolls, has been projected to be approximately $12.3 million per year, on a normalized basis, for the first 10 years. Estimated operating expenditures of approximately $120 million over the course of the initial operating decade will provide an economic boost to existing suppliers and will result in continued business and service industry development.

The growth of consumption expenditures and corresponding economic benefit generated is directly related to growth in population and disposable income per capita. In terms of population growth, the establishment of a university in Northern British Columbia has both direct and indirect population enhancement implications. Direct population growth will be effected through the development of student, faculty and staff population complements. Indirect population enhancement will be effected through visitors who come to the region, through incremental growth of indigenous business units and through the creation of new business enterprises. Overall, increased personal consumption expenditure will enhance the disposable income of the indigenous population, which will in turn create further benefits for all residents of the North.

The total identifiable university-related expenditures expected to be generated as a result of establishing a university in the North through the development of a university facility, servicing an ongoing and growing university program, and accommodating an increase in population, is estimated to approximate $290 million which will create approximately a minimum of 3,500 person-years of employment in the construction, education and service-

related industries and contribute approximately $200 million to GDP over the initial 10 years of operation.

INTANGIBLE BENEFITS

The establishment of a university in the North will generate many benefits for northern residents which are difficult to quantify. Included in these benefits is an enhancement in the comprehensive quality of the provincial education system through increased program and specialization capacity. Students facing enrolment restrictions at UBC, SFU and UVic will now have a positive, "B.C. made" alternative to seeking their higher education out of the province.

The establishment of a university in the North will enhance access for B.C. residents to professional, industrial and technical education and training and will increase interest and participation in post secondary education programs for both northern students and adults. Northern employers will have "home grown" graduates who have a greater understanding of the environment, thus reducing high recruitment and turnover costs. Northern communities will benefit through increased population and business development making the option to "stay at home" for northern students more attractive. The location of a university in the North will reduce the relative costs of education for northern residents and will allow many employed northern residents an opportunity to upgrade their formal education through adult education and extension programs.

The location of a university in the North will generally enhance the quality of life through increased awareness of the importance of education and general knowledge, and also through university-inspired social programming. In addition, the establishment of a new university will provide an opportunity for teachers, students, northern residents and the government to participate in the development of a new tradition and center of excellence for the North.

SUMMARY

The establishment of a university in Northern British Columbia has intrinsic social, economic and political benefits for the residents of the province's northern regions. It is anticipated that many of the residents educated in the north will remain in the north to live, work and contribute to the on-going development of northern communities. In addition, the availability of a skilled work force will enhance the ability of northern communities to diversify their economic base through the attraction of non-resource based industries such as manufacturing and knowledge industries. This diversification will further increase the viability of northern communities, stabilize northern economies, increase disposable income and, ultimately, improve the services and opportunities available to northern residents. The entire province will benefit

from the enhancement of higher education alternatives made available through the establishment of the new university.

APPENDIX H

Written Submissions Received

From the outset, the committee was determined to obtain the widest possible range of input to assess the northern needs and priorities respecting degree level education. Specific groups were targeted for face to face discussions and over 200 northern and provincial organizations were contacted, in writing, for their specific comments, suggestions and opinions. In addition, newspaper advertisements were placed in all the northern papers - daily and weekly - to invite input from any organization not contacted directly, and the general public.

The response was extremely helpful to the committee. Over 65 written submissions were received and some contained expert analysis and detailed recommendations. All were carefully considered. A list of those who made representations is included below. Their submissions contain many valuable suggestions and are recommended for further study by the President and Board when appointed..

Names

Anthony J. Brummet, MLA, North Peace River
Association of Physiotherapists and Massage Practitioners
Association of Professional Engineers
B.C. Association of Social Workers
B.C. Farmers' Institute
B.C. Health Association
Bear Lake Community Commission
Brian Gardiner, MP, Prince George Bulkley Valley
British Columbia Medical Association
Canadian Council of the Blind
Cariboo Tribal Council
Carolyn Linden
* Carrier Sekani Tribal Council
Carrier-Sekani Tribal Council
Charles T. McCaffray
Child Development Centre, Prince George
City of Prince George
City of Terrace
* City of Terrace
COFI Northern Interior Lumber Sector
* College of New Caledonia
College of New Caledonia
College- Institute Educators' Association of British Columbia
* District of Hudson's Hope

District of Kitimat
Dr. J. Galt Wilson
Early Childhood Educators, Caledonia Branch
Fort St. John & District Chamber of Commerce
Hon. Jack Weisgerber, MLA
* Indian & Northern Affairs Canada
Institute of Chartered Accountants of B.C.
Kitimat - Terrace & District Labour Council
Kjell Swennomson
Lois Boone, MLA, Prince George North
Mark Hawkins
Mayor John Backhouse, Prince George
Mayor's Task Force on Downtown Concerns (Prince George)
McBride Area Economic Development Committee
Mining Association of B.C.
Ministry of Environment
* Molly Eichar
Ms. Baehr and Ms. Green
North Central Municipal Association
Northern Faculty of Forestry Committee
Northern Interior Union Board of Health
Northern Lights College
* Northwest Community College
Physiotherapy Association of British Columbia
Prince George and District Labour Council
Prince George Association of Community Living and
Cerebral Palsy Association of Prince George
Prince George Chamber of Commerce
Prince George Regional Development Corporation
Quesnel District Advisory Council
Quesnel School District
R.G. Holtby
Regional District of Fraser-Fort George
Registered Nurses Association of British Columbia
Registered Psychiatric Nurses Association of B.C.
Robson Valley University Forest Committee
School District #49, Central Coast
School District #55, Burns Lake
School District #56, Nechako
School District #57, Prince George
School District #60, Peace River North
The Faculty Association of CNC
Town of Smithers
Village of Fort St. James
Village of Telkwa

* copy of submission to Ministry

APPENDIX I

Market Research

This Appendix is the executive summary of two market surveys conducted by Decima Research for the Implementation Planning Group.

EXECUTIVE SUMMARY

A. INTRODUCTION

This executive summary highlights the results of the two surveys undertaken by Decima Research for the Implementation and Planning Group (IPG) regarding interest in the proposed University of the North. A third section of this summary synthesizes results from the two studies and presents conclusions and recommendations.

The two groups identified by the IPG as having the greatest potential to make up the student body were interviewed. These groups were high school students in Grades 11 and 12 and adults aged 19 to 35 years. In both cases, only those living in the northern part of the province, defined as Williams Lake and north, were considered part of the target population. Interviewing took place between late-October and mid-November of 1989. In both studies, 500 respondents were interviewed by telephone. With a sample of this size, results are reliable at the ±4.2% level 19 times out of 20.

In all, students from six school districts were interviewed. These were Terrace, Boundary Terrace, Peace River, Prince Rupert, Prince George and Boundary Prince George.

B. HIGH SCHOOL STUDENTS RESULTS

Education Plans

Most (85%) students who had some type of job in mind for when they finish their education believe that they will require some form of post-secondary education to obtain the type of work they want. Further, most of this group expected to get this training at a college (36%) or a university (50%). The value placed on higher education by students is further confirmed by the fact that 63% of all students interviewed thought it was "very likely" that they would take some kind of post-secondary education or formal training. Once again, for many of these students wanting a post-secondary education, a university degree

was cited frequently (43%). This was especially the case among Prince George (55%) students. In all, those who said they were "very likely" to take some post-secondary training and those who cited a university degree as their education goal, represented 35% of all students interviewed. Among Grade 12 students, 37% fall into this category, while among Prince George students it was 48%. This suggests that there is quite a strong interest among approximately one-in-three Grade 12 students in the region, although this is considerably higher in Prince George. It is important to note that this figure is derived from questions asked prior to any probing about a university in the North.

Finally, in terms of plans, among those saying they were likely to take some form of post-secondary education, a plurality say they would rather take courses at a college first and then transfer to a university, rather than go straight to a university (43% versus 20%).

Interest in a University of the North

There is little doubt in students' minds that a degree-granting university should be established in the northern part of the province. In all, six-in-ten students say there is a great need. This does vary somewhat by school district, though, fully 78% of Prince George Grade 11 and 12 students say there is a great need, but only 40% of Peace River North students say this.

In addition to a perception of need, there are also considerable expressions of interest in attending university in the North. In all, 73% of Grade 11 and 12 respondents say they would either be "very" (34%) or "somewhat" (39%) likely to apply for admission if a university were established in Prince George. This figure is obviously unrealistic as an estimate. However, when only those who say they are "very likely" to apply and who also, in answer to an earlier question had indicated that they planned to attend university are considered, then 16% of Grade 11 and 12 students can be considered as potential applicants. This figure goes as high as 25% among Prince George students and as low as 4% among Prince Rupert students.

There are a number of pieces of evidence to suggest that a substantial number of students who might have gone south for an education would consider staying in the North. First, among those who answered an earlier question regarding transferring to university from college, fully 72% of this group indicated that they would prefer to transfer to a university in the North than one outside the North (26%). Second, a substantial majority (73%) of students agree with the statement:

> If there was a university closer to where I live I would definitely apply for admission.

In all, 96% of our target group, that is, those claiming to want to attend university and saying they would be very likely to apply to a university at Prince George, agree with the statement.

Third, only a minority of students (36%) agree with the statement:

> Even if there was a university in the North, I would still prefer to leave the North for my education.

Interestingly, only 22% of the target groups agree with this statement. The lure of elsewhere appears to be stronger for Prince Rupert compared with Prince George students (47% versus 24%).

Fourth, most students (72%) agree with the statement:

> It would be cheaper for me to study in the North than go anywhere else for further education, even if I had to move somewhere else in the North.

Fully 36% of the target group agree with this statement.

Fifth, only one-third of students and only 23% of the target group agree that:

> If I went to a university, I think I would have a much better time at one in the South than one in the North of the province.

Sixth, and finally, most students (82%) have few, if any, concerns about the quality of courses offered at any university opened at Prince George. This includes the target groups (86%). This suggests that for most students, concerns with quality will not be a significant barrier.

Organization and focus of the university

There are obviously a number of ways in which a University of the North could be organized. Among Grade 11 and 12 students, most (70%) prefer to concentrate all courses in one central location. This is particularly the case for our target group (78%) and for Prince George residents (77%). Further, most (61%) students including the target group (72%) also say they would be more likely to attend if the university were in one central location, rather than in a number of centres.

This is not to say that some students would not be responsive to campuses being established in other cities in the North. In fact, close to one-in-three students say they would be more likely to attend, although almost the same number say they would be less likely.

While these results appear somewhat contradictory, they likely reflect a concern that if the University of the North were spread across a number of centres, the range of programs offered might be diluted. At the same time, as noted, there is some interest in the campus idea. The danger will be that if the idea of satellite campuses is pursued, the range or quality of programs offered will be seen to be limited because of the campus system. Moreover, as is evident later, what students want is a university that is like other universities. If the structure of the university were to cause students to question whether "is this really a legitimate university?", then the level of enrollment could be seriously hurt.

Finally, as noted above, students want the University of the North to be like other universities. This is evident from the fact that an overwhelming majority (82%) of students say that the focus of the university should be similar to that of other universities, and that the University of the North should not try to give the university a distinctly northern focus.

Services and courses desired

There is little doubt that students have a clear set of priorities in terms of the services and qualities they expect at the University of the North. Table 1 indicates that the quality of the staff is assigned the greatest level of importance, with 82% of the target group saying it is a very important factor. In addition, the range of programs and the quality of the campus library are also perceived to be important qualities.

TABLE 1

VERY IMPORTANT QUALITIES FOR A UNIVERSITY

	General Population %	University Bound %	Target Group %
Excellence of staff	74	81	82
Quality of campus library	61	69	64
Range of programs offered	67	74	71
Residences on campus	35	41	36
Good social life in the city	41	40	44
Good sports/recreational facilities	44	43	41
Opportunity for part-time work	60	61	62
Proximity to family home	31	31	53
Intramural sports	17	19	19
Low tuition	56	55	63
Living costs kept minimal	60	62	65

One more factor of particular importance is that of the opportunity for part-time work. This suggests that some links will need to be made between the university and the business community in terms of employment potential for students.

Just as students have a clear idea of the range of services they most want, they also indicate a clear direction regarding what specific programs should be offered. Table 2 shows that, particularly among the target group, applied computer science, commerce and business skills and education are the areas of greatest interest. Among women, education, health administration, nursing and child care are of particular importance. Among men, industrial engineering and natural resource management are important areas.

TABLE 2

INTEREST IN POSSIBLE PROGRAMS TO BE OFFERED

	VERY INTERESTED	
	General Population %	Target Group %
Applied computer science	24	33
Commerce/business	24	28
Education/teaching	19	27
Child care	18	17
Criminology	17	18
Bachelor of arts	16	22
Fine arts	16	18
Industrial engineering	16	13
Natural resource management	15	15
Health administration	14	17
Physiotherapy	10	18
Nursing	9	15
Northern studies	5	6

Of particular interest, given the rejection of a specifically northern focus of the university, is the fact that only 5% of students and 6% among the target group cite northern studies as an area in which they would be interested in taking courses toward a degree.

C. YOUNG ADULTS (19 TO 35 YEARS OF AGE)

Educational experience and interest in further education

Close to half (48%) of young adults living in the northern part of the province, including those over 25 years of age (47%), report that they have never attended any form of post-secondary institution. Nine percent (9%) report having graduated from university, and a further 5% report some university experience. These figures for university attendance are well below national figures for young adults, and indicate the extent to which living in the North represents a barrier to advanced education.

Evidence for this comes from the fact that in responding to a series of agree/disagree statements, 97% of young adults agree with the statement:

Having a good education is becoming more and more important.

Further, 81% of young adults agree with the statement:

I would like to upgrade and improve the kinds of job skills I have.

And only 16% agree that:

> Because the British Columbia economy is resource-based, having an education system which produces a highly skilled and educated population is less important than in some other parts of the country.

Finally, 97% of young adults say they are either "very" (45%) or "somewhat" (42%) interested in taking courses of some kind at a college or university. Interestingly, age does not seem to diminish interest or previous post-secondary experience. Fully 52% of university graduates and 46% of 25- to 29-year-olds report themselves as "very interested," as do 40% of those who are married. Moreover, among those expressing an interest, 36% say they are interested in either a post-graduate degree (14%) or a bachelor's degree (22%). This translates into 13% and 20% respectively among young adults overall in the North. However, a more accurate estimate can be gained by only considering the aspirations of those who say they are "very interested" in post-secondary education. When this group is considered, then one-in-five young adults say they are "very interested" in either a post-graduate degree (9%) or a bachelor's degree (11%).

Interest in studying in the north

Just as there is fairly strong interest in post-secondary education among young adults in the North, there is also strong interest in attending a university

in the North. Not surprisingly, most (68%) young adults had heard either "a lot" (34%) or "something" (34%) about the proposed university in the North. This was especially the case in Prince George where 73% say they had heard "a lot." Further, support for having a university in the North is overwhelming -- virtually all (97%) believe it is important to have a university while 74% say it is "very important." Even among those who have no interest in taking further programs or courses, two-thirds say it is "very important" to have a university in the North.

As well as interest in the concept, substantial numbers of residents say they would be interested in taking courses at a university in the North. This is evident from the fact that only 23% of the young adult population agree with the statement:

> Even if there was a university in the northern part of the province, I wouldn't be interested in taking any courses there.

More importantly, only 15% of those who indicate they are "very interested" in post-secondary education agree. Further, only 13% overall agree and the same number among the "very interested" agree with the statement.

> Most people in the north of the province who want to go to a university would prefer to go outside the northern area rather than to one that might be built in the North.

While these responses cannot be taken as estimates of interest in attending, they do give some sense of the overall interest and pride associated with establishing a university in the North.

There is, in addition, some evidence that those who might have gone outside the area for university would be prepared to stay in the North. Moreover, most (56%) who had indicated an interest in further education indicate they would be much more likely to take courses at a university in the North than their present option of a college. This is especially the case with university graduates (62%).

Further evidence for the desire to stay in the North rather than travel south for additional education comes from the fact that close to two-thirds of those saying that they are "very interested" in taking post-secondary courses say they would prefer to travel to another location in the North than travel south for any post-secondary education. The main reason given for this preference is that it is closer to home.

However, while most young adults who have a strong interest in post-secondary education say they would prefer to relocate in the North, few (11%) say they would be "very likely" to relocate in order to take courses, although half (52%) say they would be prepared to relocate on a temporary basis.

Clearly, based on the small proportion saying they would be prepared to relocate, the proportion of young adults actually relocating in order to attend courses could be quite small. Estimates of this population as it relates to locating a university in Prince George are made later in this summary.

While there are a number of barriers to relocating, the main ones cited by those with an interest in attending post-secondary courses are being away from the family and loss of income.

Interest in Attending A University at Prince George

Consistent with earlier expressions of interest in both pursuing post-secondary education and attending a university in the North, interest in taking courses if a university were established in Prince George is strong. In all, 27% of young adults say they are "very likely" to apply for admission to the university. In particular, large numbers of Prince George residents say they are "very likely" (49%) to apply. However, just as with the estimates for high school students, these estimates are very unrealistic and need to be adjusted.

The best way to do this is to consider those who, in addition to saying they are "very likely" to apply, also express interest in either a post-graduate or bachelor's degree. When this is done, 7% and 8% respectively of young adults meet these criteria. This suggests that 15% of young adults in the North could be considered as part of the target groups. This breakdown is shown in Table 3. For those living in the Prince George area this figure, as Table 3 indicates, reaches 30%, but is only 12% among young adults living outside the Prince George area.

TABLE 3

LIKELIHOOD OF ATTENDING A UNIVERSITY IN PRINCE GEORGE AND INTEREST IN UNIVERSITY DEGREE

	General Population %	University Bound %	Target Group %
Very likely and interested in post-graduate degree	7	4	16
Very likely and interested in bachelor's degree	8	8	14
Somewhat likely and interested in post-graduate degree	5	8	8
Somewhat likely and interested in bachelor's degree	8	11	7
Very likely, other certification	11	12	19

Of further interest is the fact that 39% of young adults who are university graduates say they are very likely to attend and express an interest in a post-graduate degree.

A word of caution is required in interpreting these figures, especially as they relate to those outside of Prince George. When those who say they are "very likely" to attend a university at Prince George are looked at in terms of their likelihood of relocating to study, only 4% of those outside Prince George meet these two criteria. This suggests that there could be only limited relocations from outside Prince George in order to attend the university.

Finally, concerns regarding the quality of the education provided at a university in the North are minimal. Only 13% of young adults believe the quality would be worse than that of a university in the southern part of the province, while most believe it would be the "same" (71%) or "better" (14%). This is also the case among those defined as the target group.

Organization and Focus of The University

Possibly, given the limited interest in relocating, there is more interest among young adults than among high school students in having several campuses instead of only one. In all, 40% of young adults say they would be more likely to attend. This is especially the case among young adults living in Terrace (70%) and Prince Rupert (65%). Obviously, this arrangement holds little interest for Prince George residents (13%).

At the same time, half (53%) of the young adult group say they would be more likely to attend if there was only one central campus. This is especially true for Prince George residents (69%) and the target group (70%). Possibly the concern among the target group and Prince George residents is very similar to the concern suggested by high school students on this issue: namely, that more than one campus could offer them fewer course choices and lower quality.

Again, the issue may be one of the university seeming to be less of a university if it appears to young adults that the university will be decentralized with no main campus. As with high school students, it is clear that young adults want the university to be very similar to other universities. And like high school students, they reject the idea of many courses including material that relates specifically to the North (90%). Although there is a fairly strong interest in attending courses at a university in Prince George, this could be enhanced in two ways: by helping students find jobs and offering courses at various times.

A significant proportion of the target group of young adults say they would have a part-time job (51%) while studying, and a small proportion say they would have a full-time job (15%). These results suggest that some type of program to find part-time jobs for students (e.g., a job bank) and the

cooperation of local business in this regard would help enhance enrollments. Also, although most in the target group say they prefer taking courses during weekdays (59%), a few in the target group express interest in evening courses (22%) and intensive type courses lasting a period of two or three weeks (13%).

Services and courses desired

Like high school students, young adults, especially the target group, have very clear expectations of what criteria are important in choosing a university. As Table 4 makes clear, the quality of the campus library, the quality of faculty and the range of programs offered are all seen to be very important. In addition, the requirement that the university have masters level programs is also "very important," especially among university graduates.

TABLE 4

LEVEL OF IMPORTANCE IN CHOOSING A UNIVERSITY

	Very Important %	Target Group %
University professors are excellent	90	87
Campus library is of good quality	88	92
Range of university programs are offered	82	86
There is the opportunity for part-time work	70	59
University masters level programs are offered	63	75
University is not too far from family home	62	55
University professors do research	60	55
Good exercise and sports facilities	55	48
Campus has residence	52	56
City provides a good social life for students	38	31

The focus of programs is also very clear for young adults and this is very close to the ratings given by high school students. Young adults and especially the target group, indicate that they have most interest in education, business/commerce, natural resource management and applied computer science. Again, males tend to be more focused on natural resources management and females on education.

TABLE 5

ATTITUDES TOWARD TYPES OF PROGRAMS

	Very Important %	Target Group %
Applied computer science	25	2
Business/commerce	24	30
Natural resource management	22	25
Education	16	32
Industrial engineering	15	10
Child care	15	14
Social work	11	13
Criminology	10	17
Nursing	9	8
Health administration	7	11
Physiotherapy	6	8

D. CONCLUSION AND RECOMMENDATIONS

These results indicate that there is a strong interest among both high school students and young adults in attending courses if a university were established at Prince George.

Not surprisingly, the level of interest is strongest in Prince George. However, it appears likely that high school students from other areas in the north would likely want to transfer to a university in Prince George if one were available. Transfer would be much lower among young adults no longer in high school or college.

In terms of estimates of potential enrollments, the data suggest that up to 16% of grade 12 students in the north would be likely to enroll in a university in Prince George. Some would do so after leaving high school, but most appear to want some college experience first. The figure of 16% must be taken as a liberal estimate and for planning purposes, should be lowered by a few percentage points.

Among young adults, the data suggest that up to 15% could enroll in a university in the north. Enrollment from the Prince George area would be much higher and 30% of young adults constitute the target group.

In both cases of students and young adults, the expressions of interest do not mean that all who are very interested would apply in the first year. These

estimates suggest who out of the population would be likely to enroll over a number of years.

Especially among high school students, it appears likely that the many who would normally go south or elsewhere to attend a university, would instead go to Prince George. In addition, some who had not thought of attending university would be stimulated to enroll. These factors are included in the estimates.

Potential students appear to want a central campus over a decentralized approach, but the idea of small satellites would likely prove acceptable. This should not be done in such a way as to undermine the idea of a main campus with a full range of courses.

Most potential students expect the university to be much like universities elsewhere in the country. They do not want any special focus. They believe the quality will be comparable with other universities and believe it is important that the university have a good library, high-quality faculty and a wide range of course choices. Potential student perceptions of all these factors will have an impact on enrollments. This impact will be negative if potential students perceive a problem in any of these areas.

There is a strong interest in a masters program at the university.

Ensuring high enrollments will also depend on offering appropriate programs. Potential students seem especially interested in applied computer science, education, business/commerce and natural resource management. At the same time, B.A.-type courses are also likely to be important to potential students.

The challenge of attracting students from outside the Prince George area can likely be made easier by offering services that help students find part-time jobs and accommodation. The idea of a residence on-campus clearly has some interest for potential students.